

OFFICE OF POPULATION CENSUSES AND SURVEYS  
SOCIAL SURVEY DIVISION

# National Health surgical footwear

A study of patient satisfaction

Sheila Bainbridge

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# National Health surgical footwear

A survey carried out on behalf of the Department of Health and Social Security to assess the extent to which National Health patients are satisfied with their surgical footwear and the procedure for its supply. The survey also aimed to find out which patients are more likely to be dissatisfied and what causes their dissatisfaction.

Sheila Bainbridge



## Acknowledgements

Several members of staff in Social Survey Division were involved in the survey. Dave Griffiths was the sampling officer, Dympna Waldron the field officer, Judy Croucher and Jude England drew up the coding frames and supervised the primary analysis of the data and David Lloyd carried out the computer tabulations.

We visited many hospitals and suppliers in the early stages of the survey in order to obtain background information. I should like to thank Mr Polley of Masters Ltd and Mrs Lucas of Queen Mary's Hospital for Children, Carshalton, and the firms who explained their record system in order that we could set up a successful sampling procedure, in particular Remploy and Philip Roe Ltd. Thanks are due to many individuals in the Supplies Division of DHSS who patiently explained procedures and technicalities. We should also like to thank the suppliers who enabled us to draw the final sample of surgical footwear patients.

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## PART ONE - Introduction

### 1 Introduction to surgical footwear and its supply

#### 1.1 Surgical footwear

Since the National Health Service Act of 1946, men, women and children with certain deformities or disabilities of the feet or lower limbs have either had their own footwear adapted or been issued with made-to-measure footwear specially designed for their particular condition as part of the National Health Service provision of surgical, medical and other appliances.

Surgical footwear can be made up as shoes or boots if the additional covering is felt necessary for warmth or to provide extra support to the appliance by extending further up the leg. It has three main functions, to protect the foot from the cold, damp and rough ground; to overcome a disability or abnormality of the foot or leg in order to provide a base which will enable the wearer to walk more easily; and in some cases to correct a deformity.

Depending on the disability of the wearer these functions have varying importance on the design of the footwear. For example, elderly people with a very painful foot condition such as arthritis or bunions are primarily concerned with having a covering for their feet which will keep the feet warm and not cause any undue pressure on already painful joints. Generally the feet are of normal shape although they may swell sometimes depending on the state of their condition. The footwear is made to a fairly standard design with only minor adjustments necessary to fit individual feet. Some pairs such as felt boots are supplied 'off the shelf' to stock sizes, and removeable insoles may be supplied to cope with periodic swelling. Thus the main function is for protection and support. On the other hand someone with a severe congenital deformity of one foot requires a supportive boot which is individually designed to fit comfortably around the deformity as well as providing a walking base to complement the other normal foot. Examples of such deformities are club foot, where the foot is twisted so that the patient walks on the outside, or equinus varus when the patient walks on tip toe. Sometimes a shortening of the leg accompanies the deformity. For these people the prime aim of their surgical boots is to improve mobility and in some cases to enable an otherwise severely handicapped person to walk. Children born with such deformities will have boots which help to correct their condition as their feet grow. For them the prime function is correction as well as support and protection.

An additional group of patients whose requirements do not easily fall into one of the three groups already

described are those suffering from spina bifida. Relatively recent advances in surgery have enabled many more babies born with this lesion in the spine to be saved than was possible previously and, therefore, most spina bifida patients requiring surgical footwear are children. They have no feeling or muscle control in their lower limbs and so their footwear must unfasten right down to the toe to enable the person dressing the child to check that the toes are straightened out and the feet in the correct position before lacing up. The paralysis does not usually affect the shape of the feet and so a stock size boot can be ordered. The other main aim of spina bifida boots is that they be hard wearing as these children once installed into their walking frames can be as boisterous and energetic as any other able-bodied child.

#### 1.2 Supply of National Health surgical footwear

If a general practitioner considers that his patient's condition would benefit from wearing specially made footwear he will refer the patient to the orthopaedic department of a hospital dealing with surgical appliances, this includes most of the main general hospitals. Some patients may already be attending the hospital for treatment and be referred directly to the orthopaedic supplies department. Usually the patient will be seen by an orthopaedic consultant or surgeon who will decide whether or not the patient requires surgical footwear. The consultant writes out a prescription containing details of the patient's condition which is passed on to the appliance officer or clerk who is responsible for administering the order of surgical appliances from private firms under contract to the Department of Health. The appliance officer arranges an appointment between the patient and a representative from the supplier. This is usually the fitter or orthotist who is trained to take measurements of the feet, liaise with the shoe maker, carry out fittings when the patient tries on the partly made footwear and check that the final shoe fits before the patient takes delivery. In some cases the consultant will also check that the footwear is suitable and he may ask the patient to return for a check-up after wearing the shoes or boots for a period of time.

Thereafter, the patient will, if the consultant has indicated that the foot condition has stabilised, often make his own arrangements for replacing worn out footwear by ringing up the appliance officer who will make out a repeat order. Fittings or new measurements may or may not be necessary for replacement footwear depending on how well the current design is suiting the patient and the changeability of the patient's condition. The consultant will generally see the patient from time to time for checkups.

## 2. The survey

### 2.1 Background

Over the years that the National Health Service has been supplying surgical footwear some complaints have been received by the Department of Health and Social Security from users of the service concerning various aspects of the footwear and its supply. The Department became concerned with finding out whether these complaints represented a wider area of dissatisfaction amongst surgical footwear users or whether this was just the normal incidence of complaints which one might expect from a bespoke service. It was decided that a relatively large scale opinion survey be undertaken on a random sample of patients recently supplied with NHS surgical footwear in order to investigate the extent of any dissatisfaction. The survey was planned to cover patient satisfaction with the surgical footwear itself, the procedure through which it is supplied and any other aspects of the service which might give users cause for complaint.

### 2.2 The aims

The survey aims to answer the following questions:

Are people satisfied or dissatisfied with their surgical footwear and the service provided by the National Health for its supply?

If people are dissatisfied:

How many are dissatisfied?

Who is dissatisfied?

What are they dissatisfied with?

### 2.3 The sample

It was decided to concentrate the survey resources on people wearing specially made surgical footwear and so adaptations to patients' own footwear were excluded. All ages of men, women and children were covered but infants issued only with corrective boots for night wear were excluded. In terms of the standard list of appliances in the Surgical Appliance Contract 1976 all 'A' category items were included plus any special footwear made up under an agreed price with the Department. Insoles issued on their own were excluded.

Approximately 1800 patients were selected who had received a new pair of surgical shoes or boots, subject to the above conditions, at some time between mid-August 1975 and mid-August 1976. The sample, which covered England and Wales, was drawn on a statistically random basis from the patient records kept by contractors who supply surgical footwear through the National Health Service. The patient's name and address was recorded

and details of the footwear most recently supplied. Any other available information covering the dates at which the patient saw the consultant, orthotist or fitter and the approximate date of issue was also noted which would help both interviewers and informant to refer to the same pair of shoes or boots during the interview. A full description of the sample design including the reasons for using supplier's records is given in the Appendix.

### 2.4 The method

A pilot survey was carried out during July 1976 with a sample of 120 surgical footwear patients. These were selected from the records of suppliers who were not involved in the mainstage sample. The questionnaire was amended in the light of these trial interviews and after discussions with the Department of Health to produce final documents for the mainstage. The fieldwork for the mainstage was carried out during November and early December 1976. Interviews took place in the patients' homes and usually lasted for about 1 hour.

### 2.5 The interview

Interviewers were given the names and addresses of the people selected and instructed to contact them personally to request an interview; for children aged 15 years or less interviews were taken by proxy. This was usually conducted with the mother or other close relative. At the questions concerning the patient's opinion on the style, fit and comfort, etc of their footwear interviewers were instructed to record the child's opinion rather than the proxy's opinion. Whenever the interviewer felt that the child was capable of answering for himself or herself these opinion questions were actually directed to the child.

As a general rule, for adults aged over 15 years interviews were only taken with the sampled person. In a few isolated cases this rule was relaxed when the sampled person was mentally subnormal and, although an adult, was living in a childlike relationship with his or her parent.

The interview covered personal details of the patient and his or her disability, details of the footwear issued and the procedures for its supply, patient satisfaction with colour and style, fit and comfort, the number of pairs available, any problems connected with getting footwear repaired and a few other questions which were considered to be indicators of patient dissatisfaction with the footwear or the service in general. The interview schedule is appended as Appendix B.

## 2.6 Response

1,827 (100%) names were selected for the mainstage sample. 95 (5%) of this sample could not be contacted; either the people concerned had moved or they were not available during the survey period.

77 (4%) were mentally retarded and could not give an interview.

71 (4%) were ineligible for other reasons, mainly because they had received their footwear outside the sampling

period. A few were recently deceased.

The remaining people were contacted and asked to give an interview.

22 (1%) refused.

1,562 (86%) co-operated. Interviews were completed with the sampled person in 1,273 (70%) cases and by proxy in 289 (16%) cases. Five interviews were rejected at the primary analysis stage due to mentally subnormal respondents giving inadequate information.



# 3 Who wears surgical footwear?

## 3.1 Age and sex

Surgical footwear is prescribed to men, women and children of all ages. Our sample of users included people aged from less than one year to 93 years. Table 1 shows the proportion of males to females interviewed and, for each sex, the distribution of surgical shoe and boot wearers in different 10 year age bands. The sample comprised 57% females and 43% males, but since a large proportion of wearers are in the older age-groups and there are more elderly women than elderly men the difference was not unexpected.

Table 1 Age and sex of surgical footwear sample compared with the general population for England and Wales. General population figures shown in brackets taken from 1971 Census.

Age	Men	Women	Persons
	%	%	%
0-9	15 (17)	8 (16)	11 (17)
10-19	11 (15)	8 (14)	9 (14)
20-29	7 (15)	3 (14)	5 (14)
30-39	7 (12)	3 (11)	5 (12)
40-49	10 (13)	6 (12)	8 (12)
50-59	17 (12)	14 (12)	15 (12)
60-69	20 (10)	27 (11)	24 (11)
70-79	11 (5)	22 (7)	17 (6)
80 & over	2 (1)	9 (3)	6 (2)
Base	662 43%	895 57%	1,557 100%

For both men and women the sample of surgical shoe and boot wearers drew a much higher proportion of older people than would be found in the general population. About two-thirds (62%) of the surgical footwear made during mid-1976 to mid-1977 was for people aged 50 years or more and almost half (47%) was made for people aged 60 years or more, whereas the proportion of the general population of this age is only 19%, as given in the 1971 Census\*. During the year '76-77 more than twice as many women aged 60 or over were supplied with surgical footwear as men (524 women compared with 222 men). The net result of this is that a third (34%) of the total sample comprises women aged 60 or over. However, sufficient numbers of all age-groups were interviewed to be able to identify most situations where age might be a contributory factor to patient satisfaction or dissatisfaction.

## 3.2 Marital status

Table 2 illustrates the marital status of men and women who wear surgical footwear. Ages have been grouped into broad bands showing young people, (0-19 years), young adults, (20-39 years), middle aged (40-59) and

\*The 1971 Census of Population has been used for all comparisons in this chapter as it is the most recent information giving comprehensive estimates of marital status, employment and hours worked for different age-groups.

Table 2 Marital status of surgical footwear patients compared with the general population of England and Wales. General population figures shown in brackets taken from 1971 Census.

Age	Married	Widowed, divorced, separated	Single	Base
<b>Men</b>				
0-19	% 0 (*)	0 (*)	100 (100)	173
20-39	% 38 (68)	5 (1)	57 (31)	90
40-59	% 75 (87)	6 (3)	19 (9)	176
60 & over	% 67 (77)	20 (15)	13 (7)	221
All ages	% 48 (52)	9 (4)	43 (44)	660
<b>Women</b>				
0-19	% 0 (2)	0 (*)	100 (98)	132
20-39	% 47 (79)	4 (2)	49 (19)	55
40-59	% 63 (82)	15 (9)	22 (8)	182
60 & over	% 36 (44)	44 (43)	20 (13)	521
All ages	% 37 (50)	29 (12)	34 (38)	890

older people (60 or over). Shown in brackets is the comparable percentage for the general population of England and Wales in these age bands.

In each age-group for both men and women a lower proportion of surgical shoe wearers were married and a much higher proportion single than is found in the general population. This is particularly noticeable with people aged between 20 and 59 years. The greatest difference is found for young women in the 20-39 year age-group where over twice as many surgical shoe wearers are single (49%) compared with only 19% of the general population. This is not totally unexpected amongst a population containing a large proportion of people with apparent physical disabilities some of which are quite severe. The next section shows that the most common disabilities of this age-group were polio, spina bifida and other congenital deformities any of which might reduce a young girl's matrimonial chances.

In the older age-group the differences in marital status between surgical shoe or boot wearers and the general population are very slight. This could be because physical disability assumes less importance to one's marriage prospects as age increases or more likely, that it is acquired disabilities such as arthritis and accidental injury rather than congenital deformities which predominate the older age-groups and would, therefore, not have been present at the time of marriage.

## 3.3 Disability

Table 3 shows the distribution for men, women and different age-groups of the three main categories of disability - medical, surgical and congenital. People were grouped according to the origin of the underlying cause which gives rise for the need to wear surgical footwear.



Table 3 Reason for wearing surgical footwear. Origin of disability-illustrating particular disorders which comprise at least 1% of sample.

Disability	Persons	Men	Women	Persons			
				0-14 yrs	15-39 yrs	40-59 yrs	60 yrs & over
	%	%	%	%	%	%	%
<b>Medical</b>							
Arthritis and related conditions	23	11	32	1	6	26	34
Polio	11	12	10	1	26	15	9
Stroke	3	2	4	*	-	1	6
Circulatory disorders	1	1	1	-	1	1	1
Paralysis as result of tumour	1	1	1	1	3	1	*
Fallen arches	1	1	1	*	*	2	1
Acquired hammer toe	1	2	1	-	*	1	2
Tuberculosis	2	2	2	-	*	5	1
Bunions	4	2	5	-	-	2	7
Other medical	11	11	10	5	6	12	13
<b>All medical</b>	<b>58</b>	<b>45</b>	<b>67</b>	<b>9</b>	<b>43</b>	<b>66</b>	<b>74</b>
<b>Surgical</b>							
Post traumatic	12	19	7	2	10	16	14
Post amputation	1	1	*	-	1	1	1
<b>All surgical</b>	<b>13</b>	<b>20</b>	<b>7</b>	<b>2</b>	<b>11</b>	<b>17</b>	<b>15</b>
<b>Congenital</b>							
Clubfoot	4	6	4	12	8	3	2
Dislocation of hip	1	1	1	2	*	1	1
Spina bifida	8	8	7	34	13	1	-
Spastic	4	5	4	13	9	3	*
Other congenital deformities	12	15	10	28	16	9	7
<b>All congenital</b>	<b>29</b>	<b>35</b>	<b>26</b>	<b>89</b>	<b>46</b>	<b>17</b>	<b>11</b>
<b>Base</b>	<b>1,557</b>	<b>662</b>	<b>895</b>	<b>258</b>	<b>195</b>	<b>358</b>	<b>746</b>

\* Denotes less than 0.5%.

Within these categories particular disabilities have been quoted where the number of persons comprised at least 1% of the total sample. The remaining disabilities within each category have been grouped together and shown as 'other'. For example 'other medical' includes muscular dystrophy, diabetes, osteomyelitis and flat feet. Overall, more than half the sample (58%) were wearing surgical footwear for some disorder of medical origin, the most common being arthritis and its related conditions. A further 29% of people had congenital deformities and 13% needed surgical footwear as a result of an accident, injury or amputation.

The second part of Table 3 illustrates the distribution of disabilities amongst surgical shoe wearers of different ages: children (0-14 years), young adults (15-39 years), middle aged (40-59 years) and older people (60 or over). Congenital disabilities dominate the sample of children (89%), the most common condition being spina bifida (34% of all children). Amongst the young adults the most common reason given for wearing surgical footwear was due to poliomyelitis and its residual effects. For the middle aged and older people arthritis and its related conditions becomes the dominant disability, a third of all people interviewed aged 60 years or over were wearing surgical footwear because of an arthritic condition.

For women the most common cause for needing surgical footwear was due to arthritis and related conditions (32%). This mainly affected women aged 50 or over. Nearly a third of the women interviewed (258 of them) experienced this disability.

Of the men interviewed no one particular disorder

dominated the sample. The largest single group was the 'post traumatic', due to a sudden injury, comprising 19% of all males. Of this group of 124 men, nearly a quarter had had accidents at work. Most of the remainder were wearing surgical footwear because of accidents of other kinds.

### 3.4 Economic activity

Table 4 shows the distribution of the surgical footwear sample for adult men and women by their employment situation. There were 47% of men working full time and 43% permanently sick or retired. In the permanently sick or retired category most men were 60 or over. However the sample does include sufficient numbers of men in the age-groups between 20 and 70 years who were in full time employment to be able to consider this group later in the report, when we are trying to identify those people most likely to be satisfied or dissatisfied with their footwear and the service.

Half the women interviewed were housewives, in the main aged 50 years or more. A further third were retired or permanently sick, most of whom were also in the older age-group.

Table 5 illustrates the proportion of surgical shoe wearers aged over 15 years who were working more than 10 hours per week compared with the equivalent proportion of the general population. Figures for comparison were calculated from the 10% sample of the 1971 Census covering people in Great Britain who had worked over 10 hours in the particular reference week. Girls and boys aged 15 years have been included in the census figures but excluded from the surgical footwear sample as this age-

Table 4 Economic activity of surgical footwear sample for adults (over 15 years) by sex and age. Table shows numbers of people interviewed in each category.

Age	Working part-time (10-30 hours)	Working full-time (over 30 hours)	Unemployed	Retired or permanently sick or disabled	In full-time education	Housewife	Total
<b>Men</b>							
16-19	1	7	2	0	9		19
20-29	2	37	2	4	3		48
30-39	4	33	3	3	0		43
40-49	0	54	4	7	0		65
50-59	4	78	6	23	0		111
60-69	6	29	4	93	0		132
70 & over	2	2	0	86	0		90
<b>All men</b>	<b>Total number</b>	<b>240</b>	<b>21</b>	<b>216</b>	<b>12</b>		<b>508</b>
<b>16 years &amp; over</b>	<b>Percentage</b>	<b>47</b>	<b>4</b>	<b>43</b>	<b>2</b>		<b>100</b>
<b>Women</b>							
16-19	0	0	2	2	7	0	11
20-29	5	9	2	6	1	3	26
30-39	2	8	0	7	0	13	30
40-49	11	14	2	15	0	17	59
50-59	18	24	3	28	0	50	123
60-69	5	3	0	73	0	162	243
70 & over	4	0	0	119	0	158	281
<b>All women</b>	<b>Total number</b>	<b>58</b>	<b>9</b>	<b>250</b>	<b>8</b>	<b>403</b>	<b>773</b>
<b>16 years &amp; over</b>	<b>Percentage</b>	<b>8</b>	<b>1</b>	<b>32</b>	<b>1</b>	<b>52</b>	<b>100</b>

Table 5 Proportion of surgical footwear users working more than 10 hours per week compared with the general population

Age	Men		Women	
	Surgical footwear users	General population*	Surgical footwear users	General population*
	Percentage working over 10 hours	Base	Percentage working over 10 hours	Base
15-39	76	110	36	67
40-59	77	176	37	182
60 & over	18	222	2	524
<b>All ages</b>	<b>51</b>	<b>508</b>	<b>13</b>	<b>773</b>

\* General population figures taken from 1971 Census.

group were eligible for work in 1971 but not in 1976 due to the raising of the school leaving age. Figures for Great Britain were used as the information for England and Wales was not readily available. Because of the fairly small numbers involved figures have been shown for 3 broad age-groups.

As one might expect a smaller proportion of our sample were working than in the general population. Over all ages only 51% of men wearing surgical footwear were working compared with 76% of men in the general population. Similarly, fewer women wearing surgical footwear (13%) were working more than 10 hours per week than would be expected of the general population (38%). For both men and women these differences were more marked in the middle aged group (40-59) than for younger adults. This is probably due to the more incapacitating disabilities experienced by the over 40's such as arthritis and its related conditions whereas the younger adults were more likely to be suffering from polio or congenital deformities of a less severe nature.

Having classified the economically active into social class according to their employment status there was very little difference between the proportion of surgical footwear patients in each class compared with the proportion in the general population.

### 3.5 Residence

Most of the people interviewed lived in private households, 91% compared with 9% who were resident in institutions. The equivalent figures for the general population are 97% compared with only 3% resident in institutions. As one might expect we are more likely to find people living in institutions amongst surgical shoe or boots wearers than amongst the general population. Most of the institution residents were living in houses for the elderly (32%) or homes for the physically disabled (33%). The numbers of people interviewed in the various institutions are listed in Table 6.

Table 6 Surgical footwear sample resident in institutions

Type of institution	Numbers interviewed
Old peoples home	44
Homes for mentally handicapped	26
Homes for physically disabled	45
Other institutions for the disabled	14
Institutions for non disabled	9
<b>Total</b>	<b>138*</b>

\*9% of total sample

The distribution of surgical footwear patients living in private accommodation compared with the general population for different sizes of household is shown in

Table 7 Surgical footwear sample resident in private households compared with the general population for England and Wales.

Size of household	Surgical footwear sample	General population of England and Wales*
	%	%
1	23	6
2	34	22
3	17	19
4	16	24
5 or more	10	29
Base	1,415	48,933.9 million

\* 1971 Census

Table 7. There is a greater proportion of 1 and 2 person households in the surgical footwear sample and consequently a smaller proportion of the larger households than is found generally, which reflects the age distribution shown in Table 1. Elderly people often live alone and this can cause problems for the less able bodied. For example, an old person may need help in putting on their footwear or may find difficulty in having to make repeated journeys to the hospital in connection with getting their surgical footwear. These situations are investigated later in the report.

### 3.6 Summary

1 Almost half of the people receiving surgical footwear between August 1975 and August 1976 were aged 60 or over, three-fifths of whom were women. For a third of this age-group surgical footwear had been prescribed because of an arthritic condition.

2 Of the people receiving surgical footwear during this period 20% were children or young people under 20 years old. Most of them were suffering from congenital disorders, the largest single group being spina bifida patients.

3 Fewer of the men and women wearing their surgical footwear were working than their counterparts in the general population. This becomes more marked with increasing age as the more debilitating disorders predominate.

4 There is no significant difference between the social class status of surgical footwear users and the general population.

5 Most of the patients interviewed lived in private households.

## 4 Description of the footwear worn by the sample of patients

Informants were asked to show the interviewer the sampled footwear in order to facilitate the interview when describing and talking about the particular pair of boots or shoes. In 90% of cases the interviewer was able to see the footwear. For the remaining 10% of interviews the shoes or boots were not available due to a variety of reasons. Some were worn out or away for repair, some of the child patients were at school and the interview was taken at home with a parent and in a few cases the surgical footwear was not worn at all and had been mislaid.

### 4.1 Type of footwear

The distribution of footwear sampled has been shown in Table 8 (for those people interested in the technical detail). The DHSS contract code numbers, by which suppliers describe the footwear made on the order form, have also been given. Agreed price footwear is made to a special order which is submitted with the estimated cost to the Department for approval. Piedro and Biffabout boots are supplied in stock sizes primarily for spina bifida children.

Almost two thirds of the footwear sampled comprised boots or shoes without a cork raise, half of these were welted and the other half of stick-on construction. The footwear comprised 63% of shoes below the ankle bone, and 37% of boots coming onto or above the ankle bone.

Table 8 Footwear worn by sample of patients

a) Made to measure boots or shoes		
Without cork raise	welted sole	%
A1/A1X (a)-(f)	stuck on sole	30
Inside cork raise up to 25mm	welted sole	7
A2/A2X (a)-(f)	stuck on sole	5
Inside cork raise 25mm-75mm		
A3/A3X (a)-(f) and	welted sole	7
A4/A4X (a)-(e)	stuck on sole	3
Inside cork raise over 75mm		
A5/A5X (a)-(d)	welted sole	2
A6/A6X (a)-(d)	stuck on sole	*
b) Other footwear		
Plastazote footwear (vacuum formed)		*
A79		
Felt top non-welted boots (stock size)		*
A80		
Piedro boots		2
Biffabout boots		2
Agreed price footwear		2
Others		1
No details given on order		5
Base (all footwear)		1,557

\*Less than 0.5%

### 4.2 Style of footwear

Table 9 gives the proportions of shoes and boots sampled in the different styles of footwear. Percentages are based on the total number of people answering the question (1,543). The 'others' category includes sandal type shoes with a bar strap and buckle and other footwear which could not be classified under the main categories.

Table 9 Type of footwear

Style	Shoe	Boot
	%	%
Gibson/Derby style	76	75
Oxford style	10	9
Seamless footwear	13	14
Others	1	2
Base	979	564

Table gives percentages based on total pairs of footwear sampled.

### 4.3 Other details of footwear

In 59% of the pairs seen the soles were made of leather, 32% were rubber or composition and 9% microcellular. A stick-a-sole had been attached to 13% of pairs. Most of the footwear seen (98%) had the uppers made of leather.

The most common form of fastening was laces (88%). Others included slip-on, zip, strap and buckle and velcro.

Generally surgical footwear is black or brown in colour (80%), but we did sample some beige shoes (6%) and navy (8%). The remaining 6% were variously coloured including red, white, tan, green and two-tone.

### 4.4 The most common footwear supplied

The typical footwear worn by 60% of the men interviewed was a lace-up shoe or boot in black or brown with leather soles and uppers. Most of these (51% of all footwear supplied to men) were also of the Derby or Gibson style.

More variety existed for the women's shoes although 32% were the typical black or brown lace-up with leather soles and heels. Seamless footwear which is generally made for arthritic and similar conditions comprised 17% of the surgical footwear made for women compared with only 9% for men. This reflects the prevalence of arthritic conditions experienced by the older women of our sample.

### 4.5 Additional appliances

Of the people we interviewed 361 (23%) wore additional surgical appliances to aid their walking. Half of these patients were suffering from medical conditions, mainly polio, arthritis or the effects of a stroke. Most of the rest had a congenital condition mainly spina bifida.

Most of the appliances worn (94%) were attached to the shoe or boot in some way, typically via a socket in the heel or sole onto which is inserted part of the appliance frame. The remaining 6% were worn inside the shoe or boot itself. An example of this type is the cosmetic caliper which is made of flesh coloured plastic moulded to the shape of the leg, usually covering the back and sides of the leg. The caliper bends round the heel to fit under the foot and inside the shoe or boot

The distribution of appliances worn by the sample was as follows:

	%
leg iron/caliper - below knee	57
leg iron/caliper - above knee	33
toe raising spring	4
plastic caliper - below knee	4
plastic caliper - above knee	2

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<i>Base (100%)</i>	<i>395</i>
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## 5 Are surgical footwear patients generally satisfied?

### 5.1 Introduction

The primary aim of the survey was to find out how many people were satisfied with their National Health surgical footwear and its supply. This chapter summarises the overall level of satisfaction and dissatisfaction expressed by our sample of surgical footwear patients in the three main areas which we found gave rise to complaint during the interview. Each of these sources of dissatisfaction is considered in much greater detail in the following chapters where we aim to examine what is causing the dissatisfaction and whether this affects one particular group of people more than others.

### 5.2 Satisfaction with surgical boots and shoes

During the interview informants were asked to talk in detail about the particular sampled pair of surgical shoes or boots which they had received during the reference period. After giving their opinions on various topics concerning their footwear, patients were asked:

*Now, thinking of all you have just said about this particular pair of shoes/boots, overall are you very satisfied, satisfied, dissatisfied or very dissatisfied with this footwear?*

The answers were proportioned as follows:

	%
very satisfied	44
satisfied	38
dissatisfied	12
very dissatisfied	6
Base (100%)	1545

Overall 82% of patients were satisfied with their surgical footwear and just under half were very satisfied. However, 6% of the people interviewed told us that they were very dissatisfied with their footwear. The people comprising the 18% who were not satisfied and their reasons for dissatisfaction are described in Chapter 6. Part 2 of the report covers all the aspects of patients' opinions of their surgical footwear.

### 5.3 Satisfaction with the arrangements for supplying surgical footwear

Early on in the interview informants were asked to describe the various stages in which they were involved during the ordering, making and final delivery of their surgical footwear. After considering the various problems which may have been encountered during this procedure informants were asked:

*Thinking of all you have just said about the arrangements for supplying this pair of shoes/boots are you very satisfied, satisfied, dissatisfied or very dissatisfied with these arrangements?*

The answers were proportioned as follows:

	%
very satisfied	40
satisfied	47
dissatisfied	10
very dissatisfied	3
Base (100%)	1540

Overall 87% of people said they were, at least satisfied with the supply arrangements for their surgical footwear which is a slightly higher proportion than were satisfied with the footwear itself. However, there are still a significant number of people, 3%, who are very dissatisfied with these arrangements. Part 3 of this report covers patients' opinions of the supply of their surgical footwear and their reasons for dissatisfaction are discussed in Chapter 14.

### 5.4 Availability of surgical footwear

The third main area of dissatisfaction expressed by patients concerns the number of pairs of shoes or boots that they have available at any one time and the frequency with which new footwear is made to replace old shoes or boots which are worn out.

At the time of the interview 35% of people said that they did not have enough pairs of boots or shoes for everyday general use. This included some people who had only just received their first ever pair of surgical shoes and would most likely be given a spare pair at some future time.

Of the people who had been wearing surgical footwear long enough to have had replacements made, 30% felt that they did not have new footwear made often enough.

Of the people who had had repairs done to their footwear 25% found that they were not able to manage whilst their shoes or boots were being repaired, for a variety of reasons associated with the lack of suitable spare pairs.

This topic seems to be the major source of dissatisfaction with the whole of the National Health surgical footwear service. Between a quarter and a third of all patients interviewed had some complaint to make concerning the lack of available pairs of shoes or boots and for some people this can severely limit their daily activities. The people affected and related contributory factors are discussed in much more detail in part four of the report.



### 5.5 Summary

The simple answer to this chapter heading, is, by and large, yes, the majority of people wearing surgical footwear are satisfied when they take all the factors into account. However, some people are very dissatisfied about certain things and a satisfactory service suits not

just the majority of users but as many users as is practicably possible and in particular those users who are dependent on their surgical footwear to lead a normal active life. The following chapters consider in more detail each of these three main areas in which people expressed some dissatisfaction.

## PART TWO - Patients' opinions of their surgical footwear

### 6 Patients' overall satisfaction with their surgical footwear

#### 6.1 Introduction

The overall level of satisfaction expressed by informants after considering all aspects of their footwear is of particular interest as this helps to put the complaints made during the interview into some form of perspective. Everyone grumbles about something from time to time and surgical footwear patients are no exception. One might also expect to find patients who are consistently unhappy about a particular feature of their surgical boots or shoes. However, when this complaint reaches such a level, or when there are so many things wrong that the wearer is prompted to say, overall, that he or she is dissatisfied or even very dissatisfied then their complaints should be treated with due importance.

In this section we look at the proportions of people who are satisfied and dissatisfied overall with their surgical footwear. We are particularly interested in those people who express overall dissatisfaction and so we go on to look at some of the personal characteristics of these patients. After studying each characteristic in turn the interrelationships are considered between those factors which seem to be associated with the greatest amount of dissatisfaction. In this way we can attempt to identify particular groups of people who are less satisfied, overall, than others. Having isolated the main groups of people who are the least satisfied we go on to look at the reasons for their dissatisfaction in the next section.

#### 6.2 Age and sex

Table 10 gives the degree of satisfaction felt by men and women in different age-groups.

Overall 13% of the males said they were either dissatisfied or very dissatisfied. The men with the most complaints were the young adults (15-39 years) where 11% were dissatisfied and 6% very dissatisfied. The second most discontented group of males were the 0-14 year old boys

(15% dissatisfaction overall) followed by the middle aged (12%) and elderly (11%) showing the least dissatisfaction. The proportions of men saying they were very satisfied reflected this pattern. The greatest number came from the elderly and middle aged groups where over half the people interviewed said they were very satisfied whereas for the younger adults only 29% claimed to be very satisfied.

Overall more women than men were dissatisfied with their footwear, 21% against 13%. As with the men, it was the younger women (15-39 years) who aired the most grievances but in a much greater proportion, 30% against 17% for the men. This includes 13% of women aged 15-39 years who told us they were very dissatisfied with their footwear. However, we must point out that a third of this same group were very satisfied with their footwear, obviously unaffected by those features which caused so much distress amongst their fellow patients.

Among the elderly women 22% claimed to be dissatisfied or very dissatisfied. This is twice the proportion of elderly men but as only 22 men were interviewed in this age-group it is too few to be able to consider this difference as significant. The least dissatisfied females were the middle aged and young girls. As with the men the women most satisfied were amongst the elderly and middle aged where 46% and 43% respectively said they were very satisfied.

#### 6.3 Working status

The level of satisfaction felt by people of different working status is shown by Table 11.

#### 6.4 Disability

Arthritis sufferers expressed the most dissatisfaction. Of the 360 patients interviewed 21% were either dissatisfied or very dissatisfied with their footwear as were two-fifths of the 57 people suffering from bunions. Other disability

Table 10 Overall satisfaction with footwear by sex and age

Age	Very satisfied	Satisfied	Total satisfied	Dissatisfied	Very dissatisfied	Total dissatisfied	Base
<b>Men</b>							
0-14	% 38	47	85	12	3	15	311
15-39	% 29	54	83	11	6	17	260
40-64	% 54	34	88	10	2	12	63
65 & over	% 59	30	89	7	4	11	22
All men	% 47	40	87	10	3	13	656
<b>Women</b>							
0-14	% 30	52	82	13	5	18	376
15-39	% 34	36	70	17	13	30	330
40-64	% 43	39	82	11	7	18	114
65 & over	% 46	32	78	14	8	22	69
All women	% 42	37	79	13	8	21	889



Table 11 Overall satisfaction with footwear by working status

Working status	Very satisfied	Satisfied	Total satisfied	Dissatisfied	Very dissatisfied	Total dissatisfied	Base
Employed full-time or part-time and unemployed	% 45	40	85	10	5	15	388
Housewife	% 43	35	78	14	8	22	399
Retired or permanently sick or disabled	% 53	32	85	10	5	15	463
At school or full-time education	% 33	49	82	13	5	18	277

Table 12 Overall satisfaction with footwear by length of time spent on feet each day

Time spent on feet	Very satisfied	Satisfied	Total satisfied	Dissatisfied	Very dissatisfied	Total dissatisfied	Base
Half a day or more	% 44	39	83	11	6	17	861
Quarter of a day	% 45	40	85	9	6	15	267
An hour or two	% 48	35	83	14	3	17	195
Hardly at all	% 46	33	79	12	9	21	143

Table 13 Overall satisfaction with footwear by the amount patients wear their surgical footwear each day

Amount surgical footwear worn each day	Very satisfied	Satisfied	Total satisfied	Dissatisfied	Very dissatisfied	Total dissatisfied	Base
All the time	% 48	38	86	10	4	14	784
Most of the time	% 47	42	89	8	3	11	385
Half the time	% 46	42	88	9	3	12	112
Not less than half the time	% 38	40	78	14	8	22	154
Less than half	% 20	19	39	32	29	61	102

groups where a substantial proportion of patients said they were dissatisfied or very dissatisfied were post trauma - 19% of 186 patients, spina bifida - 17% of 116, and polio or its residual effects - 16% of 164 patients.

### 6.5 Level of activity

We asked each informant to give us a rough estimate of how long they spent on their feet each day standing and walking about, whether for half a day or more, quarter of a day, an hour or two or hardly at all. The proportions of people expressing varying degrees of satisfaction are shown in Table 12.

The least mobile people who were hardly on their feet at all during the day seem to be the most dissatisfied with their footwear (21%). Those who got about very little, for just an hour or two, and the very active, half a day or more, were less likely to be satisfied than the moderately active. Let us look briefly at the least active and the most active which seem to be indicators of dissatisfaction. The amount of time spent actively walking about and standing during the day tends to decrease with age.

Two-thirds of the people who are hardly on their feet at all were 60 and over whereas the younger adults and children were more likely to say that they were on their feet for half a day or more. Of the 130 adults who were hardly on their feet at all during the day 45% were housewives compared with only 30% of those who were active for half the day or longer (718) whereas 35% of the people on their feet for half a day or more were working full or part-time compared with only a handful of those hardly on their feet at all during the day.

Analysis of disability by activity indicates that, as one might expect, the people more likely to be hardly on their feet at all are the arthritics. Patients suffering from other disabilities seem to be on the whole more active.

### 6.6 How much the footwear is worn

Patients were asked to estimate the amount of time each day that they wore their surgical footwear. Table 13 gives this breakdown analysed by whether the patients were satisfied or dissatisfied overall with their footwear.

People who wear their surgical footwear for half of the day or longer seem to be generally satisfied, in fact, nearly half of them said they were very satisfied. Significantly fewer people are satisfied who only wear their surgical footwear for less than half the time (78%) and there is quite an outstanding drop in the proportion of people satisfied (39%) who claim not to wear their surgical footwear at all. We can presume that these patients are not wearing their surgical footwear because the very source of their dissatisfaction makes the shoes or boots unwearable.

There is such a large proportion dissatisfied (61%) that we should look further at the people who did not wear their footwear at all. They are more likely to be women than men, 8% compared with 5% for men, and in the older age-groups. If we also include people who wear their footwear for less than half the time then we find that 20% of women compared with 12% of men came into this category. The proportions of people hardly wearing their surgical footwear tend to increase with age. Just under a third of the women aged 70 or over wear their surgical footwear for less than half the time including 13% who do not wear them at all.

Consideration of the working status also reinforces these differences. Of the people not wearing their surgical footwear at all 40% were housewives and 30% retired. Similarly for those only wearing their surgical boots or shoes for less than half the time the greater proportion (25%) were housewives or retired (22%), whereas the people wearing their footwear for all the time were

distributed fairly evenly between the workers 34%, the housewives 29%, and the retired or permanently sick 34%.

People suffering from arthritis or bunions are more likely to be amongst those not wearing their surgical footwear than other disabilities. Some 20% of the (419) arthritis and bunion sufferers wore their surgical shoes for less than half the time and a further 9% did not wear them at all. This is almost twice the proportion than for any of the other main disability groups.

### 6.7 Who is dissatisfied with their surgical footwear?

In the preceding sections we have described the various individual characteristics of patients who are generally dissatisfied with their surgical footwear. Here we would like to draw these features together and isolate the four main groups of people who seem to be more dissatisfied overall than the average surgical footwear patient.

The first group of interest are the older ladies. We found that 22% of women aged 65 years and over were dissatisfied or very dissatisfied with their surgical footwear. A substantial proportion of these women will be suffering from arthritis and its related conditions as this forms the most common cause for requiring surgical footwear in the case of older women. On looking at the level of dissatisfaction for different disabilities we found that patients with arthritis, its related conditions, and bunions, were more likely to express dissatisfaction than patients with other complaints. Arthritides were also less mobile and wore their surgical footwear for less time each day than the other disability groups. These are all factors which are associated with general dissatisfaction. These interrelationships are not altogether surprising as the arthritic diseases and severe bunions are very painful conditions and coupled with the age of these patients would tend to reduce mobility unless the surgical footwear provided fully compensates with perfect comfort and support.

The second group of people who seem to be having problems with their footwear are the younger women in the 15-39 year age-group. Almost a third of this group (30%) were prompted to give an overall rating of dissatisfied including 13% who were very dissatisfied. Most of these ladies are housewives commonly suffering from the residual effects of polio or spina bifida or other congenital deformities. Each of these characteristics was associated with dissatisfaction.

The third group we shall be looking at more closely in the next section are the young men aged 15-39 years as they formed the least contented group of males interviewed. Characteristics which were generally found to be associated with dissatisfaction and which were particularly prevalent among this age-group include the disabilities of post trauma or the effects of polio. Also this group are among the more active surgical footwear patients and in section 6.5 we found that the most active as well as the least active were more likely to be dissatisfied.

The fourth group we will look at further are the children. Although in the analysis of satisfaction by age and sex the 0-14 year old girls came above average, the boys were more dissatisfied than average. Other factors which point to children being a potentially dissatisfied group are that 18% of people in school or full-time education were dissatisfied and that spina bifida which was the most common disability of the children interviewed also seems to be associated with less satisfaction than average.

### 6.8 Reasons given by those people dissatisfied overall with their footwear

All informants were asked to give the overall assessment of their surgical footwear. Those people who said that they were dissatisfied or very dissatisfied were then asked:

*May I just check, what are your main reasons for being (very) dissatisfied with these shoes/boots?*

The proportions of men and women giving the various reasons are shown in Table 14. Where possible the interviewer recorded just one main reason but some people were unhappy with several aspects of their footwear and where there was not one overriding source of dissatisfaction more than one reason was recorded. The percentages shown in Table 14 are based on the total number of people answering the question rather than the total number of reasons given and therefore do not add to 100.

Table 14 Main reasons for dissatisfaction with footwear

	Men	Women	Persons
	%	%	%
Fit and comfort	67	81	76
Style and colour	35	37	36
Difficulty putting on footwear	14	13	13
Durability	24	6	12
No longer aids condition	2	6	5
Other reasons	11	7	8
Base	85	183	268

For both men and women almost twice as many people gave fit and comfort as a main reason for being dissatisfied with their surgical footwear than any other reason. The next most frequent complaint was a dislike of the style and colour which was given considerably more attention than the other various reasons. A quarter of the men also mentioned durability whereas not so many of the women were affected by inadequate wear of their boots or shoes. For the women, misfit and discomfort were clearly the most overriding causes for dissatisfaction with their surgical footwear. Other sources of dissatisfaction included poor quality of the footwear or workmanship and other aspects of appearance such as the shoes being of odd colour. A few people complained that their shoes were squeaking.

The numbers of men and women answering this question are too small to make any statistical comparisons between different age-groups; however, a few indications could be mentioned for the main sources of dissatisfaction. For both men and women the relative importance of fit and comfort over other complaints increases with age. About half of the children 0-14 years

gave this as a main reason but this proportion gradually increases to nearly nine tenths of people aged over 65 years. As one might expect, style and colour is particularly important for the 15-39 years age-group where three quarters of those dissatisfied gave this as their main reason. It was of less importance to the children and older adults and mentioned by only about one tenth of the elderly. Durability is more the concern of the young, two fifths of those aged 14 years or less felt this was a main cause of dissatisfaction as did one tenth of the 15-39 year olds but very few older people felt this was a major cause for concern.

It is interesting to note that a number of both men and women felt that their surgical footwear was no longer aiding their condition and that this caused them sufficient distress to rate their footwear as generally unsatisfactory. Out of the 14 people who made this comment three concerned corrective footwear provided for children, such as:

*They did not work or improve her condition,*

or:

*They weren't doing the job of pulling her feet outwards.*

It must be remembered that these criticisms were probably made by non medically qualified people, however, proxy interviews were taken with a parent or other adult who was closely involved with the child and even if medically unqualified such a person would be able to notice whether or not improvements had been made. Most of the other comments in this category were made by older people and concerned inadequate support such as:

*There isn't enough support in them, I need something stronger.*

Now let us consider the reasons given by those particular groups of people who were found in the previous section to be the most dissatisfied overall with their footwear.

#### 1 Women aged 15-39 years

Of the 23 women in this age-group 18(three quarters) gave fit and comfort as a reason for dissatisfaction with their footwear and 15(three fifths) gave style and colour. These two reasons were mentioned far more frequently than any other reason.

#### 2 Older women aged 65 or more

By far the most common cause for complaint amongst this group was poor fit and comfort mentioned by 77 out of the 89 ladies (nine tenths). Style and colour were mentioned by 20 and much smaller numbers gave other reasons.

#### 3 Men aged 15-39 years

These young men were primarily concerned with the style and colour of their footwear. Out of the 19 men in this age-group saying they were dissatisfied or very dissatisfied overall with their footwear 17 gave style and

colour as a major cause for dissatisfaction. Ten mentioned fit and comfort and five durability.

#### 4 Children 0-14 years

The main reasons for dissatisfaction felt by the children were fit and comfort, mentioned by 19 out of the 41 children concerned, and style and colour mentioned by 20 of them. Concern for the lack of durability in their footwear was mentioned by 15 children. The other reasons were given far less frequently.

The relative importance of the different sources of dissatisfaction varies between these special groups in a way which one might expect. The older women are mainly concerned with fit and comfort whereas style and colour begins to assume an importance for the younger women and also the younger men. For the children a variety of reasons are important, those already mentioned and, as one would expect durability in their footwear. However, it is interesting to note that for each of these groups poor fit and comfort is just about the most important factor in producing dissatisfaction.

#### 6.9 Summary

It would appear that poor fit or discomfort represent the major source of patients' dissatisfaction with their surgical footwear. This was mentioned twice as often as its nearest rival - a dislike of the style or colour. Out of the 268 people who were either dissatisfied or very dissatisfied overall with their surgical footwear 76% gave poor fit or discomfort as one of their main reasons, 36% mentioned the style and colour and 13% or less gave other reasons. Poor fit and comfort was also ranked highly by each of the groups of people forming special pockets of dissension, but in particular the older women seemed to be suffering rather more than the others.

Chapter 6 has been concerned with setting the picture of patients' dissatisfaction with their surgical footwear. We have only looked at the opinions given by those people who, after considering all the potentially good and bad features of their footwear feel sufficient cause for complaint to say that overall, their surgical footwear is unsatisfactory. These patients' opinions are very important as they are the people who might feel prompted to take some action about their complaint.

However, the surgical footwear service aims to satisfy all its users not just those who are most likely to complain and so we will now go on to look at the opinions of all patients on those particular topics which were the cause of so much distress to a few. Each of the major sources of dissatisfaction was the subject of a separate group of questions which were asked of everyone during the main part of the interview. In the following chapters we look at each of these topics in turn and investigate the proportion of surgical footwear users expressing each complaint and who in particular is affected.

## 7 Fit and comfort

### 7.1 Introduction

Ill fitting boots or shoes and other features which cause discomfort seem to be the main source of patients' dissatisfaction with their surgical footwear. In this section we look at the various features which may contribute towards uncomfortable footwear and the proportion of people experiencing discomfort in each case. We then describe who is most likely to be affected and consider any other related factors which might help us to identify what is causing or contributing towards this discomfort, so that steps can be taken to prevent the supply of ill fitting or uncomfortable footwear.

### 7.2 Changes of fit over time

Anyone who has bought a pair of stout leather boots or shoes will recognise that they may take time to wear in. As most surgical footwear is of this design we felt that some initial stiffness or rubbing would be inevitable. On the other hand close fitting footwear can soften or stretch with wear over time and lose its supportive value. Because of these factors we decided to ask two questions about the fit of patients' footwear, one relating to the initial fit:

*When you first started wearing this pair of shoes/boots did they fit comfortably or not?*

and a second, after wear:

*Sometimes the fit of a shoe/boot changes over time; do they fit comfortably now?*

A few people such as spina bifida patients had no feeling in their feet because of their disability and so were not asked to comment on the comfort of their footwear.

For the remaining 1,490 informants their replies to these two questions are shown in Table 15 below:

Table 15 Proportion of wearers finding footwear comfortable at first and now

Comfort	At first	Now
	%	%
Fitted comfortably	71	70
Did not fit comfortably	29	18
Surgical footwear hardly worn since new	-	9
Now outgrown or outworn	-	3
Base	1,490	1,490

Although the proportions of people whose footwear fitted comfortably on both occasions are practically the same they do not include all the same people. Of the wearers (135 people) 9% had not worn their (new) shoes enough to comment on changes of comfort after wearing.

If we exclude all these we find:

	%
Comfortable at first and after wear	65
Comfortable at first, but not comfortable after wear	9
Uncomfortable at first, but comfortable after wear	14
Uncomfortable at first and after wear	12
Base (100%)	1315

It will be seen that two out of three people find their footwear fit comfortably at first, and remain comfortable throughout wear, while one in eight say they are uncomfortable when they first get them, and remain uncomfortable. There is some change in comfort with wear for about one in four wearers, and there is some consolation to be found in this result which is that the comfort of surgical footwear is more likely to improve over time rather than deteriorate. Some improvement will be brought about by a gradual easing of tight spots and a general wearing-in of the shoes but alterations are sometimes made by the NHS or by the patients themselves. We shall look at the way people set about improving the fit and comfort of their surgical footwear later on in this chapter. A deterioration in fit is generally due to the footwear beginning to wear out, it has stretched and becomes too large, or that the patient's condition has changed. This can best be illustrated by looking at the reasons given by the people whose footwear fitted uncomfortably both at first and later.

### 7.3 Why surgical footwear does not fit comfortably

The reasons for discomfort given by the 437 people whose footwear did not fit comfortably when it was first supplied are shown in Table 16. The percentages do not add up to 100 as more than one reason was given by some

Table 16 Reasons why surgical footwear did not fit comfortably when first supplied

Reason for not fitting comfortably	Percentage of people giving reason
Too small/tight/narrow (toes affected)	22
Too small/tight/narrow (other parts of foot affected)	26
Too stiff/too hard	19
Too large/slack	13
Inner part of shoe uncomfortable (eg insole or arch support not fitting)	13
Too heavy	6
Upper edge of shoe or boot too high, cutting into or rubbing ankle bone or leg	7
Other reasons	18
Base	437



people and the percentage is based on the total number of people reporting discomfort rather than the total number of reasons.

Almost half the people suffering from ill fitting shoes or boots claimed that it was at least in part due to the footwear being too small or too tight, especially around the toe area. Some people complained of rubbing, pinching or pressure causing sores on the toes sometimes even making them bleed. Others just said that there was not enough room for the toes and they felt cramped. Sometimes this meant that patients could only wear their shoes or boots for a short time because their feet became too painful. Other areas where tightness occurred included those across the foot when the footwear was too narrow, or round the back where they chafed or cut into the heel. Other reasons included various parts of the shoe or boot rubbing or pressing on the foot causing callouses and blisters, stiffening in the wrong place, misfit because the patients' feet had changed size or sometimes the footwear fitted so oddly that the patient had difficulty walking in them and felt that they were falling over or being tipped forward on to their toes. It must be remembered that some of the surgical footwear supplied is for corrective as well as supportive purposes and to a certain extent this must cause discomfort until the patient's condition has improved. It is for the patient's consultant to decide how much of this corrective element can be introduced before the footwear becomes too uncomfortable to be borne. However, if the patient finds he is unable to walk about without being in considerable pain, he might well have doubts as to the value of surgical footwear.

Let us now look at the 275 (18%) people whose footwear did not fit comfortably 'now' after wear. Approximately half of them said that it was for the same reason as before, the proportions being roughly similar to those shown in Table 16; therefore, there had been no improvement in the way these shoes or boots fitted. About a quarter of the people concerned gave reasons indicating that the useful life of the footwear was nearing the end, the shoes or boots were wearing out, they had become too large or the patient's condition had changed. The remaining quarter of people gave various other reasons similar to those described for initial discomfort, rubbing, tightness, feeling of being thrown off balance, and various parts of the shoe/boot causing pressure, irritation or pain which only became evident after some wear.

#### 7.4 Who is suffering from ill fitting footwear

It is the aim of the National Health Service to supply its patients with surgical footwear which fits correctly and comfortably. We cannot comment, from this survey, on the correctness of the surgical footwear supplied to our informants; that we would have to leave to medical specialists. However, we can describe those people who feel that they are wearing surgical footwear which does not fit comfortably.

Table 17 shows the proportions of men and women in different age-groups whose footwear fitted, or did not fit

Table 17 Whether footwear fits comfortably or not when first supplied and after some wear

Age	At first			After wear		
	Fitted comfortably	Did not fit comfortably	Base	Fitted comfortably	Did not fit comfortably	Base
<b>Men</b>						
0-14	% 76	24	127	80	20	96
15-39	% 70	30	112	83	17	101
40-64	% 73	27	237	86	14	226
65 & over	% 79	21	154	86	14	137
All ages	% 74	26	630	85	15	560
<b>Women</b>						
0-14	% 75	25	93	82	18	67
15-39	% 60	40	70	75	25	61
40-64	% 70	30	284	75	25	260
65 & over	% 66	34	413	73	27	367
All ages	% 68	32	860	75	25	755

at first and after some wear. The percentages are based on the number of people who could answer this question and so excludes those whose footwear was worn out or had not been worn at the time of interview. On the whole men seem to be better off than women. Almost a third of all the females interviewed felt that their footwear did not fit comfortably at first and a quarter felt the same way after some wear, whereas for the men the comparable figures are a quarter and 15%. The people most affected at first are in the 15-39 age-group, however there is a considerable improvement for these people after some wear.

The proportion of people whose footwear does not fit comfortably reduces by 15% (from 40% to 25%) for women aged 15-39 and 13% (from 30% to 17%) for men aged 15-39 years which is a greater improvement than is found in any other age-group.

We were particularly concerned with the fit of children's shoes, but it would seem that on the whole they are no worse off than the adults. Considerably fewer girls experienced ill fitting footwear, particularly at first, than the older women. There is little difference between boys and girls, but a greater proportion of boy's footwear did not fit comfortably after some wear (20%) than the comparable proportions for older men (14% to 17%).

There are several other personal factors which could be related to fit. An important consideration is the patient's disability. There is some indication that a person with clubfoot or bunions is more likely to suffer initially from ill fitting footwear than with other disabilities.

Approximately two fifths of these patients experienced ill fitting footwear compared with about one third of those suffering from arthritis or post trauma surgery and about one quarter of the people suffering from the other main disorders of polio, stroke, spina bifida and other congenital disabilities. However, clubfoot patients seem to be quite successful at 'wearing in' their footwear as only a quarter of them complained of ill fitting footwear after some wear. On the other hand fewer of the patients suffering from the more painful foot disorders of arthritis and bunions were able to wear in their footwear and

consequently a higher proportion of these patients were still suffering after some wear.

It was thought that active people might be more prone to ill fitting footwear after a time of wear than the less active but this is not necessarily the case. Of the people who were hardly on their feet during the day 26% complained of ill fitting footwear compared with 21% of those who were on their feet for half a day or more.

**7.5 Procedure for ensuring good fit of surgical footwear**  
During the supply of surgical footwear various procedures are carried out which aim to ensure that the patient is supplied with well fitting footwear. The patients' feet are usually measured or a plaster cast taken or sometimes both are done. The measuring stage may be omitted if the patient is just reordering a new pair of surgical shoes or boots and his condition remains apparently unchanged. In this case the footwear is made up to the same specification as the previous pair. Sometimes the patient will have a fitting when he tries on the footwear in its partly made state. One or more fittings may be made before the fitter is satisfied and the shoemaker completes the footwear. Generally patients receiving footwear for the first time or having a pair made up to new measurements will have fittings. The footwear may be checked by a hospital doctor - consultant or surgeon, at some stage or maybe more than once. The absence of any of these stages may result in footwear which does not fit as well as it might. In this section we consider whether any of these factors appear to have had such an effect.

People receiving their first pair of surgical boots or shoes are more likely to have measurements taken or have several fittings etc, than someone who is just reordering a replacement pair. We thought that this extra attention might result in better fitting footwear but it does not appear to be the case. More people receiving their first pair of surgical boots or shoes complained that they did not fit comfortably at first (35%) than those receiving a replacement pair (28%). It could be that first time patients are not used to sturdy footwear, and thus find them uncomfortable until they get used to them, but there is some evidence to suggest that this is not the only explanation, as while 80% of those with replacement footwear find their current pair comfortable after wear, only 75% of first time wearers find them comfortable after use.

Let us consider next whether measurement or fittings resulted in better fitting footwear. Table 18 shows the proportions of people whose footwear fitted and did not fit comfortably at first by the measurements taken.

From these figures it would seem that measuring the feet for each pair of shoes or boots does not increase the patients chances of being supplied with comfortable footwear. Of the people whose footwear was made up to previous measurements 74% had comfortably fitting footwear compared with 70% who had measurements taken for the pair of shoes or boots discussed during the

Table 18 Measurement taken on feet by whether the footwear fitted comfortably or not at first

Measurement taken for these shoes/boots	Surgical footwear, on supply		
	Fitted comfortably	Did not fit comfortably	Base
Feet measured (only)	% 70	30	970
Plaster cast taken (only)	% 45*	55*	29
Both - (measured and cast)	% 71*	29*	51
No measurements taken at all (replacements)	% 74	26	435

\*The numbers involved are very small, these percentages are only an indication

interview. It must be remembered that the people ordering replacement footwear, whose feet are remeasured are almost certainly people who are having some fitting trouble with their surgical shoes. People who are happy with their footwear just ring up and reorder without requesting any further consultation. If we consider just those people receiving replacement footwear, 29% whose feet were measured complained of ill fitting footwear compared with 26% of the people who had no measurements taken at all. So it would seem that even if ones feet are measured when reordering a new pair of shoes or boots one is not necessarily going to be supplied with comfortably fitting footwear.

It is difficult to assess the usefulness of taking a plaster cast as only 80 people from the survey had a plaster cast taken and 51 of these were also measured. The addition of a plaster cast to measurement made no difference to the proportion reporting comfortable fit, and where the plaster cast was the only means used, (29 cases), 13 said the footwear fitted comfortably and 16 that it was uncomfortable. This does suggest the value of taking plaster casts is doubtful.

The effect of having fittings on the partly made up footwear follows much the same pattern. Of the people who had had fittings 30% told us that their footwear did not fit comfortably at first compared with 28% of those who had not had fittings. Following the previous results this is not unexpected as patients whose feet were measured would normally also have fittings.

#### 7.6 Other factors influencing comfort

During the preliminary investigations for the survey patients mentioned other factors, apart from fit, which caused discomfort whilst the footwear was being worn. In this section we look at the answers given by all patients who had sufficient feeling in their feet and legs to be able to comment on these additional sources of discomfort. Where a significant number of people expressed discomfort we also considered who was most affected.

#### 7.7 Weight

*Generally do these shoes/boots feel - too heavy, too light or about right?*

The answers given by men and women in different agegroups are shown in Table 19.

Women are generally more affected by the heavy weight of their surgical footwear than men. A quarter of the women aged 15-64 felt their footwear was too heavy

Table 19 Opinions of men and women on the weight of their surgical footwear

Age	Surgical footwear is:			
	too heavy	too light	about right	Base
<b>Men</b>				
0-14	% 19	-	81	113
15-39	% 19	3	78	105
40-64	% 19	3	78	226
65 & over	% 14	1	85	138
All ages	% 18	2	80	582
<b>Women</b>				
0-14	% 14	2	84	80
15-39	% 25	3	72	61
40-64	% 25	*	75	260
65 & over	% 23	1	76	367
All ages	% 23	1	76	768

\*Less than 0.5%

compared with 19% of the men in these age groups. There is no one particular age-group which seems to be more affected than the others. For the men the 65 year olds and over are less concerned than the younger men but for the women the reverse is true, the young girls are less worried than the older patients.

We wondered if the length of time people spent on their feet each day or the type of life they led as represented by their working status might cause some people to consider their footwear too heavy. However, analysis of these factors showed that the proportions of people saying that their footwear was too heavy did not differ markedly for different levels of activity, neither was there a difference between the employed, housewives, permanently sick or retired, or whether the footwear was replacement or new issue.

There is little difference as far as composition of the shoes is concerned, the proportions saying they find the shoes too heavy being very similar for those wearing leather soled footwear (22%) compared with rubber or composition (20%), although a small proportion of those with micro-cellular soles find them too heavy (15%).

## 7.8 Stiffness

We asked patients:

*Do you find that generally the shoes/boots are - too stiff, bend too easily or are about right?*

There was virtually no difference between those who were being issued with surgical footwear for the first time or having replacements, or between men and women. There were 8% of men and 9% of women who said they were too stiff, 3% of both men and women who said they bent too easily and 89% of men and 88% of women who said they

Table 20 Stiffness of surgical footwear expressed by patients in different age-groups

Age				
	Too stiff	Bends too easily	About right	Base
0-14	% 11	5	84	191
15-39	% 10	7	83	164
40-64	% 9	3	88	485
65 & over	% 7	2	91	504
All ages	% 9	3	88	1,344

were about right. It would seem that children are possibly more likely to consider their footwear too stiff than the older people. Table 20 gives the distribution of answers for patients in different age-groups.

There is a small decreasing trend with age in the proportions of people saying that their footwear was too stiff. It is not unexpected that children are more hampered by stiffness than adults. The low proportion of elderly people considering their footwear is too stiff is explained by the soft type of footwear which is most commonly supplied to this age-group for arthritic conditions.

The composition of the soles does not seem to be a factor in causing the wearer to consider their footwear too stiff, or to bend too easily - as the original data show that similar proportions of those with leather soles complain of stiffness, or bending too easily as do those with rubber or composition, or micro-cellular soles.

## 7.9 Calefaction

Patients were asked:

*Wearing these shoes/boots would you say your feet got unduly hot - most of the time, sometimes or seldom?*

The answers given by men and women in different agegroups are shown in Table 21.

Table 21 Whether patients' feet get unduly hot whilst wearing their surgical footwear

Age	How often feet get hot			
	Most of the time	Sometimes	Seldom	Base
<b>Men</b>				
0-14	% 23	28	49	112
15-39	% 19	31	50	104
40-64	% 15	18	67	225
65 & over	% 6	15	79	138
All ages	% 15	22	63	579
<b>Women</b>				
0-14	% 17	35	48	80
15-39	% 10	33	57	61
40-64	% 14	18	68	260
65 & over	% 7	19	74	366
All ages	% 11	21	68	767

On the whole men are more likely to suffer from their feet getting too hot than women. Of the men 15% said that their feet got hot most of the time compared with 11% of women. This is to be expected as men's surgical footwear is generally of a much stouter design than the ladies' and as most of the men will be at work all day the opportunities for taking their shoes off to let their feet cool down are somewhat limited. We did find that people who were working were more likely to suffer from hot feet than housewives or the retired. The latter groups are able to spend a greater part of the day wearing slippers or other cooler footwear. We illustrate this further in a later section where we look at the reasons given by people who do not wear their surgical footwear all day.

Looking at the distribution between different age-

groups, children are more likely to suffer from hot feet than adults. In all 23% of boys and 17% of girls complained that their feet got hot most of the time. Children's surgical footwear is generally required to be corrective and supportive and as such will be of a built-up construction often coming well above the ankle. These boots are more likely to provoke hot feet than the lower cut shoes provided to many of the adults who only need a covering for their particular foot condition.

Before leaving the question of calefaction, it is worth noting that first time wearers of surgical footwear are less likely to find their feet get unduly hot (80% saying this seldom happens) compared with those who have had replacements, where only 63% say their feet seldom get unduly hot.

Again, there is no difference in proportions claiming their feet get unduly hot most of the time for those with soles made of different materials, although rather more of those wearing footwear with rubber or composition soles say their feet sometimes get unduly hot (25%) compared with those with leather soles (20%) or micro-cellular (17%).

#### 7.10 Ways of improving fit and comfort of surgical footwear

We found earlier that of the people whose footwear did not fit comfortably at first 14% improved over a period of wear. Some of these improvements will be brought about by a gradual easing of tight spots and generally 'wearing in' the footwear to the shape of the patients feet. Improvements may also be made by carrying out alterations either by the National Health Service or by the patients themselves. We asked three questions which we thought might indicate the extent to which people need to modify their surgical footwear after it has been made.

**National Health Service alterations.** We found that after being supplied with their surgical footwear and getting them home 14% of patients had to take their footwear back because there was something wrong. Of the reasons given for returning the footwear 77% were concerned with misfitting or some other form of discomfort. The remaining 23% of reasons were complaints about the workmanship or that the patient felt the shoes or boots had not been made up to the correct prescription.

This result is reflected in the way people answered the question concerning overall satisfaction with their footwear. Of the people whose footwear had to be taken back 44% were dissatisfied or very dissatisfied overall compared with only 11% whose footwear did not have to

be taken back.

#### Patients' own alterations to their surgical footwear.

Some 4% of the total sample said they had made some alterations to their surgical footwear, and 10% had bought additional pads or footaids.

In some cases these alterations or additions were to extend the life of the footwear - for example fixing stick-on soles or metal studs, or additional toe-caps to prevent scuffing. In other cases it was to facilitate putting on shoes, such as replacing the laces with elastic, or because the footwear caught or rubbed on other garments or attachments such as the man who sawed the back straps off his boots as they were catching on his calipers and another who modified the tongue of his shoes to stop it coming out as he walked.

Most of the footaids bought were heelgrips, archsupports or pads to relieve pressure, and it is interesting to note that while 5% of those wearing surgical footwear for the first time added a footaid, this proportion rose to 11% of those more used to wearing special footwear.

If we look at those who said their footwear was not comfortable when they first received it, the proportion using footaids rose to 15%, 18% of those having replacement footwear compared to 7% of first time wearers.

Perhaps more worrying are the people who alter the footwear itself, to make them more comfortable or acceptable, like the woman who had her shoe built up on one side by her cobbler friend:

*to stop me going over when I walk*

or those who had the heel raised or lowered to make them more comfortable. Some had had part of the shoe stretched, or even cut away to avoid pressure, and others had insoles removed or modified as they found the footwear too tight, and wanted more room for their feet.

Unlike footaids, which replacement wearers were more likely to add, the first-time wearers were just as likely to have their footwear altered or modified where they did not fit comfortably when they first got them as were those more used to wearing surgical footwear.

Since these alterations may detract from the efficiency of the footwear, the high proportion of those who do not find their footwear comfortable when they receive it and who have such alterations made, (7%) need some attention. There is some evidence from comments made that while most doctors and fitters are considerate of patients' feelings, a few are insensitive when patients complain of discomfort, or even pain.



## 8 Colour and style

### 8.1 Choice of colour

There is nothing in the supply regulations limiting the range of colour that could be supplied, and 80% of our sample had been supplied with black or brown footwear, 8% with blue or navy, and 6% with beige. A few people had white, red, or other colours.

Most of our informants (88%) had been given a choice of colours; as one would expect, a higher proportion of women reported having a choice than did men, and it would seem that, for those age-groups where colour was more likely to be important, more attempt was made to give a choice (Table 22).

Table 22 Proportion of men and women of different ages who were given a choice of colour

Age	Men	Women
	%	%
0-14	79	85
15-24	87	88
25-49	93	95
50-64	89	94
65 & over	79	89
All ages	85	91

Where a choice was given, in 90% of cases one colour offered was black, and in 94% of cases (not necessarily the same) one of the colours was brown. Indeed, in 45% of cases, the choice was between black or brown only. It is interesting to note that although only 8% of footwear supplied was navy or blue, 40% of patients had been offered navy or blue footwear. Cream or beige was available to 26% and red to 18%. Some other patients mentioned a wide variety of colour choice, including green, tan, white (mainly children), and 6 of our informants asserted they could have had pink.

In the main, where a choice of colour was given, both men and women were satisfied with the range of colours open to them (95% and 94% respectively). The majority of dissatisfied men had only been offered a choice of two colours, and none had been offered more than three. Women seemed to have a greater number of colours to choose from, less than 40% only having two alternatives, 42% having three, and 20% having a choice of four or more colours but still wanting a greater range. Most of them however, wanted a choice from basic shoe colours, such as black, brown, tan, navy, cream/beige/stone or white, although some mentioned other colours.

Where no choice of colour was given, nearly 30% would have liked a choice, and here again the basic colours predominated. As could be expected, while 20% of the men said that they would have liked other colours

available, the proportion for women was almost twice as great (39%).

It might be thought those getting replacement footwear might not be given a choice of colour, on the assumption that they had already chosen their colour. This was not so, as the original data show that 89% of those replacing had a choice of colour, compared with 82% of those getting footwear for the first time.

In conclusion, it would seem that if suppliers could offer a slightly extended range of basic colours, black, brown, tan, beige/stone/cream, with perhaps red or white for children, to more women and first time wearers, particularly those aged 15-24 almost all the dissatisfaction with choice of colour would disappear.

### 8.2 Choice of style

Although 22% of all patients told us they had been given a choice of style, 78% claimed not to have been given any choice. This would include some people who were quite happily reordering the same footwear without thinking of changing the style. However, there are still some quarters of the surgical footwear wearers who are not offered any choice when they order their surgical footwear.

**Who was offered a choice of style?** One might imagine that women would be more likely to be offered a choice than men but this is not the case. There is virtually no difference between the sexes; however, there is a difference between age-groups.

33% of the 15-39 year olds were given a choice of style, as were:

27% of the 40-64 year olds,

19% of the 65 or over and

12% of the children 0-14 years.

As we would expect, patients are more likely to be offered a choice when they are of the age at which style is most important, at young adult or middle age.

It was envisaged that people receiving their first ever pair of surgical boots or shoes might be more likely to be offered a choice of style but this does not seem to have been the case. Of the people receiving footwear for the first time 21% were given a choice compared with 23% of those receiving a second or later pair.

**Who would like to have been offered a choice of style?** Of the people who had not been offered a choice of style 32% of the men would like to have been given a choice and

Table 23 Whether or not patients would like to have been offered a choice of style.

Age		Would have liked choice	Not concerned	Base
<b>Men</b>				
0-14	%	35	65	135
15-39	%	68	32	81
40-64	%	26	74	168
65 & over	%	13	87	119
All ages	%	32	68	503
<b>Women</b>				
0-14	%	52	48	85
15-39	%	76	24	46
40-64	%	54	46	208
65 & over	%	34	66	331
All ages	%	46	54	670

46% of the women. Table 23 shows the breakdown by sex and age of those people who would have liked a choice of style compared with the people who were not concerned.

It is the young adult age-group who are most concerned about having a choice of style, in particular the young women. Of women aged 15-39, 76% would have liked to have been offered a choice of style. The age-group least concerned were, not surprisingly, the older people. They tend to be more concerned about the fit and comfort of their surgical footwear than the looks.

### 8.3 What styles were available

We asked the people who had been offered a choice of style to describe briefly the choices which were available.

Different types of fastening were mentioned, laces or zips, buckles or slip-on. People were offered different types of footwear, brogues or a court style, Oxford or Derby, shoes or boots. Different markings on the uppers were sometimes available, patterned or plain, with or without toe caps. Ladies were sometimes offered different heel heights.

It seems that generally the sorts of choices were limited to alternative features but based on the same shoe or boot shape. A few people mentioned that they could have had any style but nobody said that there was a range of styles to view, from which one could be picked as would be the case if one were purchasing ordinary footwear.

### 8.4 Are patients satisfied with the style of their surgical footwear?

Out of all patients interviewed 81% said they were satisfied with the style of their surgical footwear.

**Who is not satisfied with the style of their surgical footwear.** Table 24 shows the distribution by age and sex of whether or not people are satisfied with the style of their surgical footwear.

On the whole women are more likely to be concerned about the style of their footwear than men. Of the women and girls interviewed 22% said that they were not satisfied with the style of their footwear compared with 16% of the males. This is not unexpected, neither is the result that the

Table 24 Whether satisfied with the style of surgical footwear by sex and age

Age		Satisfied with style	Not satisfied	Base
<b>Men</b>				
0-14	%	84	16	144
15-39	%	64	36	117
40-64	%	88	12	240
65 & over	%	94	6	155
All ages	%	84	16	656
<b>Women</b>				
0-14	%	76	24	111
15-39	%	59	41	76
40-64	%	77	23	288
65 & over	%	84	16	415
All ages	%	78	22	890

age-group most likely to be dissatisfied with style are the 15-39 year olds in both sexes. There were 41% of women aged 15-39 years who said they were not satisfied with style which is a very high proportion; 36% of the men in this age-group were not satisfied. The people least concerned are the older folk aged 65 and over. As we have seen from earlier results, they seem to be more concerned with the comfortable fit of their surgical footwear rather than the looks. However, even the lowest proportion of 6% discontent for men 65 and over still represents a substantial number of surgical shoe and boot wearers who feel unhappy about the appearance of their footwear.

**What makes people dissatisfied with style.** Looking further at the 19% who were not satisfied, most of them just did not like the appearance of their surgical shoes or boots. We received comments such as:

*They are big and awkward, with no shape,*  
or:

*I think they are ugly*

Ladies said things like:

*They look like men's shoes,*

and:

*They are so clumsy with a dress - have to stick to trousers.*

A few people mentioned that they always had the same style and would have liked some variation.

Some people mentioned features of their footwear which caused them discomfort. These points we have already mentioned in the previous section covering fit and comfort.

**Ways to improve the style.** We asked the patients who were dissatisfied with the style of their footwear to mention any particular features which they would like their footwear to have which would improve the style. Some people suggested stitching or a pattern on the uppers, eg

*something fancy across the front,*

or

*white stitching around the toes of the shoes*

to break up the plain front. Some people would have preferred different fastening eg a bar and buckle rather than laces, or a slip-on court shoe or elastic sided boots. A

few people wanted lower or higher heels and wedge heels were also mentioned. Other people said that they would like a lighter weight style for summer like a sling back or a shoe with perforations to let some air into hot feet.

Different shapes were mentioned such as square toes or pointed toes; however, the most frequent comment was a plea for more fashionable, elegant shoes incorporating some of the modern designs of ordinary footwear.

In conclusion, it is appreciated that surgical footwear, by its very nature, may have to be substantial, and we know that many orthotists do put a great deal of thought into how to improve the appearance without detracting from its purpose. However, it would seem that many patients would be more ready to accept having to wear surgical footwear if some small alteration to the fastening or stitching could be made, or if they could see samples, or even photographs of styles to choose from.

## 9 Difficulty in putting on footwear

### 9.1 How many people experience difficulty putting on their surgical footwear?

All patients except the very young were asked whether or not they were able to put on their own boots or shoes.

Of the wearers aged 10 or over, 13% could not put on their own footwear without help. This is generally related to age and any condition which leaves patients partially handicapped. The age group 10-14, most of whom were spina bifida or spastic patients, had the highest proportion who could not put their shoes on themselves (37%), compared with 15% of teenagers; and only 5% of those in their twenties needed help to put on their footwear. The rate for the 30-50 year olds was about 10%, the 60 year olds 12%, rising again for the 70's and over to 18%.

The need for help in putting on surgical footwear can have quite serious consequences for people who are living on their own. In the survey everyone who was resident in an institution was classified as a single person household but most people living in an institution will have access to assistance if necessary from more able bodied staff. However, 10% of the people who were not able to put on their own footwear live in private houses or flats etc on their own. This represents about 1.5% of all adults receiving surgical footwear in any one year who cannot wear their surgical shoes until someone comes along to help them dress.

If we look at the disabilities of those people who need help putting on their footwear we find that stroke patients are most likely to be affected. About half of them could not put on their own surgical shoes. About 40% of the spastic patients and 34% of the spina bifida patients were similarly affected. The proportions then drop to roughly one fifth or less of the other disability groups.

All the people who could put on their own surgical footwear were asked whether they had any difficulties, either putting on their shoes or boots or fastening them; 19% said yes, they did have difficulties. The disabilities causing the most problems are the same as those outlined above. About half the stroke patients had difficulties, about a quarter of the spastic patients, one fifth of the spina bifida patients and just over a quarter of the arthritic patients experienced some difficulty in putting on their footwear. For the other disability groups the proportions were one fifth or less.

### 9.2 What causes difficulty putting on surgical footwear

In all, some 29% of surgical footwear patients aged 10 years or older either cannot put on their surgical footwear by themselves or experience difficulties when doing so. These patients were asked to explain what was causing the difficulties and to give any suggestions for ways in which the footwear could be modified to make it easier to put on and fasten.

The most frequent complaint was that the laces were difficult to fasten. For anyone with an impairment which affects the hands the necessity to lace-up shoes, or even worse, a long boot tightly, can present a real problem. This is in part due to having to feed the ends of the laces through small holes and some people suggested that hooks would make things easier although on some pairs the hooks bent closed and made things worse. Other people suggested that zips or a strap and buckle would be easier. For people who are more severely handicapped elastic laces or velcro were suggested which need little or no dexterity to fasten.

Quite a few people mentioned that a slip-on style with no fastening at all would be preferable, although we recognise that for some people this would not be suitable. For some people the opening in the shoe was too small for them to get their feet in easily or the shoes or boots altogether were too small. A wider opening or lower cut sides to shoes would help them. Some patients mentioned that softer leather would make their shoes or boots easier to open and therefore easier to put on. A few people commented that they had to use a shoe horn or that pull-on tabs would be a useful asset.

On the whole patients were reluctant to criticise the footwear for being the cause of their difficulties. We asked everyone whether they thought that their problems were due to the boots or shoes themselves or their own general condition. A large proportion of those having difficulty (76%) said it was because of their own general condition, 6% blamed the footwear itself and 18% said it was a bit of both. This indicates that people will not needlessly blame their surgical footwear and are prepared to accept that some difficulties are an inevitable consequence of their own disability. However, in some cases certain features might be incorporated into the design of a pair of shoes or boots which would make them easier to put on provided that this did not interfere with the surgical nature of the footwear.

# 10 Durability and workmanship

## 10.1 Patient satisfaction with the wear of their surgical footwear

What was unsatisfactory. Most patients (89%) were satisfied with the amount of wear they got from their surgical shoes or boots. Nearly all of the 11% who were not satisfied could name a particular part of their footwear which always wore out quickly. Most commonly this was the heels, then the toes and the soles. Several people mentioned that the uppers in general wore out quickly. Sometimes one shoe wears out much more quickly than the other. Other comments included surgical insoles wearing out quickly, zips breaking and cork insoles cracking.

Several people commented that the soles came away from the uppers after a fairly short period of wear. This comment was also made by quite a number of patients who felt that their surgical footwear was not well made. Most people, 94%, felt that their footwear was well made but the remaining 6% gave us a variety of criticisms about the quality of workmanship of their surgical shoes and boots. Several people mentioned that their shoes were not waterproof or that they shrank in wet weather. There were a number of individual comments concerning such things as the shoes having rough edges; stitching coming apart quickly, the leather being poor quality or thin or cracked easily; nails were sticking up inside the shoes or that the shoes did not match exactly. One person said that the mass produced shoes he had now were not so good as when they were hand made. Other comments concerned inadequate wear which informants felt were due to badly made footwear, such as, the soles were thin or not strong enough or came away from the uppers quickly, the heel fell off, or the inner sole and lining came away.

Who is not satisfied with the wear of their surgical footwear. There were 14% of men who were not satisfied with the wear of their surgical boots or shoes and 9% of women. There is a considerable difference between the age-groups of patients who were satisfied with the wear properties of their footwear. Table 25 shows the proportions by age and sex of those not satisfied.

As one would expect the most active patients are least satisfied. There were 22% of the parents of boy patients who were not satisfied with the wear properties of their sons' surgical footwear compared with only 5% of the elderly men and women.

Table 27 Length of time before footwear needs repairing for different age-groups

Age	Time before repair needed						Base
	Less than 1 month	1 - 2 months	3 - 5 months	Within 6 months	6 - 11 months	12 months & over	
0-14	% 34	41	18	93	7	-	164
15-39	% 17	31	32	80	17	3	160
40-64	% 9	22	33	64	28	8	387
65 & over	% 4	17	26	47	40	13	326
All ages	% 12	25	28	65	27	8	1,037

Table 25 Patients who are not satisfied with the wear of their surgical footwear by sex and age

Age	Percentage not satisfied with wear of their surgical footwear					
	Men	Base	Women	Base	Persons	Base
0-14	22	103	19	70	21	173
15-39	19	108	18	55	18	163
40-64	12	203	9	199	10	402
65 & over	5	111	5	237	5	348
All ages	14	525	9	561	11	1,086

Similarly from Table 26 we can see that the patients in employment are less likely to be satisfied than the retired or women working at home.

Table 26 Adult patients who are not satisfied with the wear of their surgical footwear by their working status

Working status	Satisfied with wear	Not satisfied	Base
Full-time or part-time employment	% 87	13	315
Housewife	% 94	6	238
Retired or permanently sick	% 94	6	307

## 10.2 How long surgical footwear lasts

As a number of patients felt that their surgical footwear did not give them adequate wear, in this section we look at how long patients' footwear lasts both before it needs repairing and before it needs replacing.

Length of time that surgical footwear lasts before it needs to be repaired Table 27 shows that children quite clearly have more wear problems than any other age-group. 34% of patients aged 14 years or under only had one month or less wear out of their surgical shoes or boots before they were in need of repair. This proportion reduces as age increases. This pattern is reflected in the proportions of people getting substantial wear from their surgical shoes or boots. Over half the older patients get six months or longer wear from their footwear before needing repair compared with only 7% of the children. Three quarters of the children get less than three months wear before their shoes or boots need replacing. The majority of young adults aged 15-39 years get between one and five months' wear, whereas for the older adults three months to one year is more common.

Length of time footwear lasts before it needs to be replaced. Table 28 gives the periods of useful life of surgical footwear for the different age-groups. We had



Table 28 Length of time before footwear needs replacing for different age-groups

Age	Time until replacement needed							
	Less than 1 month	1 - 2 months	3 - 5 months	6 - 11 months	Within 1 year	12 - 17 months	18 - 35 months	3 years & over
0-14	% -	17	41	31	89	9	1	169
15-39	% 1	4	10	33	48	27	17	147
40-64	% -	-	3	20	23	27	27	338
65 & over	% -	-	2	10	12	28	34	290
All ages	% -	4	11	21	36	24	23	944

asked patients:

*How long do your shoes/boots last before they need to be replaced?*

From Table 28 we can see that the time elapsing before the footwear needs replacing increases with age. The most usual period for those aged 15-39 is between six months and a year, for 40-64 year olds between a year and three years, and for the retirement age-group between 18 months and three years. Children, on the whole, get between three and six months wear from their boots (58% of them get less than six months wear). This is not surprising as most of the 0-14 year olds will still have growing feet. However, 17% of children can only expect one or two months wear from their surgical footwear.

The DHSS do not stipulate a particular time period after which surgical footwear should be replaced. However, it appeared from the comments made by informants that some hospitals use as a rule of thumb one new pair per year. It is interesting to look at how many patients feel that their footwear needs to be replaced before this period. Of the 15-39 years age-group 48% need their footwear replacing within a year and 15% within five months. The footwear of the middle aged adults lasts a bit longer but still 23% would like them replaced within the year. All but 12% of the older patients get one or more years wear from their surgical shoes and for 60% their footwear lasts 18 months or longer.

Many patients manage to wear their surgical footwear for one year or more before replacement is necessary, and replacement once a year is a good guide-line for both patients and appliance officers. However, there is evidence that this guide-line is sometimes being applied as if it were a rule, and as the results of Table 28 show, this would be detrimental to many patients. It may be beneficial if all persons authorising replacement had their attention drawn to the DHSS handbook 'Provision of Medical and Surgical Appliances' which states: *The frequency at which replacements will be necessary cannot, of course, be arbitrarily determined as much will depend upon the individual circumstances and disability of the patient. The sole criteria for deciding whether replacement is justified should be the serviceability of the appliance and the continued clinical need.*

It is interesting to note that about a quarter of people aged 40 years and over manage to get three or more years wear from their surgical shoes and so would not need to take up their full entitlement of one pair a year.

This topic is again covered in Chapter 19 where we look at the duration of wear of surgical footwear by the

frequency of replacement. This is discussed in the context of the number of pairs of boots or shoes available to a patient at any one time. Patients whose footwear lasts considerably longer than their replacement rate actually manage to accumulate pairs, however, on the other hand many patients do not get their footwear replaced often enough and find difficulty managing whilst they are waiting to order a replacement.

**Other factors which relate to the durability of surgical footwear.** Comparisons were made between the main disabilities experienced by surgical shoe and boot wearers. The differences found were primarily related to age. Most spina bifida patients, who were in the main children or young adults, needed their footwear replacing in under a year; whereas arthritis and its related conditions generally afflicts the elderly who usually manage one year or more from their surgical shoes. Within any one age-group there was very little difference between disabilities. However, some individuals walk in a manner which causes the patient to drag a foot or lean heavily on one side or scuff the footwear. This gait may be found with patients of varying disabilities and will affect the durability of surgical footwear.

One would expect footwear worn by the active patients, whatever their disability, to wear out more quickly than that worn by more sedentary people and this was the case. Of the people whose footwear needed replacing within a few months about three quarters were on their feet for half the day or more, whereas of those whose footwear lasted a couple of years or longer only about half the patients were this active.

### 10.3 Durability of different types of surgical footwear

There are several different types of surgical footwear, the most common being a made to measure shoe or boot which has either a welted or a stuck on sole. These are supplied with either a flat sole or with a raised sole of varying heights depending on the requirement of the patient. In this section we compare the durability of the welted and stuck on construction, with and without a raise. All other types of surgical footwear have had to be analysed together as there were too few in the sample to show separate comparisons. These types include, plastazote footwear, felt top non-welted boots (stock size), Pedro and Biffabout boots and agreed price footwear.

**Length of time footwear lasted.** Tables 29 and 30 show the length of time that different types of surgical footwear lasted before they were in need of a repair and before they needed to be replaced.

Table 29 How long different types of surgical footwear lasted before they needed to be repaired  
(asked only of people who had been wearing surgical footwear long enough to need a repair)

Footwear	Time before repair needed						
	Less than 1 month	1 - 2 months	3 - 5 months	Within 6 months	6 - 11 months	12 months & over	Base
Made to measure boot or shoe welted construction							
without raise	% 11	24	29	64	27	9	358
with raise	% 12	23	32	67	25	7	219
Made to measure boot or shoe stuck-on construction							
without raise	% 11	29	25	65	26	9	287
with raise	% 22	18	32	72	23	5	87
Other types	% 17	20	31	68	26	6	54
All types	% 12	25	29	66	26	8	1,005

Table 30 How long different types of surgical footwear lasted before they needed to be replaced  
(asked only of people who had needed replacement footwear)

Footwear	Time before footwear needed replacing						
	Less than 6 months	6 - 11 months	Within 1 year	12 - 17 months	18 - 35 months	3 years & over	Base
Made to measure boot or shoe welted construction							
without raise	% 13	20	33	28	26	13	316
with raise	% 6	18	24	27	26	23	209
Made to measure boot or shoe stuck-on construction							
without raise	% 21	24	45	22	22	11	235
with raise	% 17	26	43	24	22	11	76
Other types	% 34	36	70	12	8	10	50
All types	% 15	22	37	25	24	14	886

Considering the time before a repair is needed there does seem to be some difference between the made to measure shoes with the stuck on sole construction incorporating a raise and the other made to measure footwear. Of the former 22% needed to be replaced within a month compared with 11 or 12% of the remaining made to measure footwear, and 72% needed to be repaired within six months compared with 64 to 67% of the remainder. The performance of the other types of footwear came somewhere in between, 17% needed to be repaired within a month and 68% within six months. If we look at the time surgical footwear lasts before it needs replacing (Table 30) a considerable difference is found.

The stuck on sole construction does not seem to last as long as other made to measure footwear with a welted sole. Just under half of the stuck on sole footwear needed replacing within a year (43 to 45%) compared with 24 to 33% of the welted footwear.

Of the other types of footwear 70% needed replacing within a year; however, the numbers on which this percentage is based are very small and comprise almost one third Piedro and Biffabout boots which are only supplied to children.

#### 10.4 Workmanship

We asked all patients whether they thought their surgical footwear was well made or not; 44% said yes but 6% said no (7% of men and 5% of women). Table 31 shows the distributions by age.

Table 31 Whether or not patients of different age-groups think their surgical footwear is well made

Age	Footwear well made	Footwear not well made	Base
0-14	% 90	10	256
15-39	% 95	5	191
40-64	% 94	6	525
65 & over	% 96	4	564
All ages	% 94	6	1,536

Once again it is the children who feel worse off. The parents of 10% of the children in the sample felt that their children's footwear was not well made compared with between 4 and 6% of the adults we interviewed. This is not due to the Piedro and Biffabout boots. Although too few were sampled to make accurate comparisons, we can say that out of the 27 pairs of Piedro boots discussed, only two (7%) were considered not well made and all of the three pairs of Biffabout boots sampled were considered well made. The difference between the children's parents and the adults' opinions arises within the normal supply of made to measure surgical footwear.

Over all ages there was generally no measurable difference between the different types of surgical footwear in respect of the wearer's opinion of their workmanship. Welted, stuck on and the other types, when grouped, produced approximately equal proportions of criticism (5 to 7% not well made). Similarly there was no apparent difference between suppliers when they were grouped for size by turnover per annum (5 to 6% not well made).

## 11 How much people wear their surgical footwear

During the preliminary investigations for the survey we found out that different people wear their surgical footwear for widely differing periods of time. Some people were so dependent on their footwear that they only took them off to go to bed. A few other people only put them on to go to the hospital for their check-up. In the main survey we asked:

*For how long do you wear surgical footwear each day, as a rule?*

The answers were proportioned as follows:	%
for all the time	51
for most of the time	25
for about half the time	7
for less than half the time	10
not at all (unprompted answer)	7

### 11.1 Who did not wear their surgical footwear all the time

Generally it was the younger and more active people who wore their surgical footwear for all or most of the time and the older and more sedentary patients who wore their footwear for half the time or less. Quite a number of patients (7%) claimed not to wear their surgical footwear at all. We will consider why this was so and which patients were involved later in this section. Here we look at the occasions when people who would normally be wearing their footwear chose not to do so.

When we checked, 61% of informants admitted that there were occasions when they did not wear their surgical shoes or boots. By far the most common occasion when people do not wear their surgical footwear is when they are at home. Most people prefer to take off their daytime shoes in the house and when the footwear is of a fairly heavy construction it is not surprising that people want to give their feet a rest. The main reason given for not wearing their surgical shoes was that they were too heavy or uncomfortable or too hot. Some even complained that their feet were too painful in their surgical footwear, which might be bad enough to stop them wearing them altogether. Some patients wanted to save wear on their footwear and also on their carpets. Only five of the 708 who don't wear their footwear in the house thought that they were not smart enough for the house. People who had difficulty putting on their surgical shoes sometimes did not bother to wear them indoors. Slippers were most commonly worn in the house, although a few people wore nothing on their feet. Others wore old shoes, boots, sandals or plimsolls.

**11.2 On what occasions is surgical footwear not worn?**  
Other occasions were mentioned when people did not wear their surgical footwear. Several people did not wear their surgical shoes when they were going out because they were not smart enough. Some of the ladies made comments like:

*I can't wear these great big black boots with an evening dress.*

In these situations other non surgical shoes were worn or in isolated cases plimsolls or slippers. During sporting activities patients often wore non surgical footwear. This mainly concerned the more active young children who usually wore plimsolls or special sports shoes. People tended to wear old shoes or wellingtons for gardening or wet weather to save wear on their surgical shoes or because more protective footwear was necessary. During very hot weather some patients wore sandals or lightweight non surgical shoes. A few children sometimes did not wear their surgical boots at school but chose to wear plimsolls or even nothing. One or two parents mentioned that only soft shoes were allowed inside school and so their children had to wear plimsolls.

A few men commented that they could not wear them for work because they had to wear boots and they only possessed surgical shoes.

### 11.3 Alterations to non-surgical footwear

Of the people who wore other, non surgical footwear 20% had attempted to adapt their slippers, ordinary shoes, plimsolls, wellingtons, etc to make them more suitable. People cut pieces out, bought larger sizes or two different sizes, added insoles or toe padding, added elastic or extra fastenings to keep them on. Some people even built up their own shoes on the outside sole or heel or may have had this done by a cobbler.

**11.4 People who do not wear their surgical shoes at all**  
Many people, 5% of men and 8% of women claimed, when asked, not to wear their surgical footwear at all. This tended to be more common amongst the older, less active age-group than with the younger patients, as was the distribution of people who wore their surgical shoes for less than half the time. Two out of three of the 75 people who gave reasons for not wearing their footwear at all say either that they are too heavy, or their feet are too painful. Ten people said they didn't wear them because of the appearance, and five because they were too difficult to put on, 15 gave other individual reasons.



## 12 Summary - Patients' opinions of their surgical footwear

1 Overall 13% of men were dissatisfied with their surgical footwear (3% very dissatisfied) and 21% of women (8% very dissatisfied). Dissatisfaction with footwear was most commonly expressed by young women aged 15-39 years (30%) followed by the older women aged 65 years or over (22%). Of the men, the young adults, 15-39 years, were the most dissatisfied (17%) followed by the boys (15%).

2 The main reasons given for being dissatisfied overall with surgical footwear were poor fit and discomfort (mentioned by 67% of the men who were dissatisfied and 81% of the women) and a dislike of the styles and colours available (35% of men, 37% of women), followed by difficulty in putting on surgical footwear, and its poor durability.

3 Women were more likely to complain than men of footwear which did not fit comfortably, both at first and after some wear. For both sexes it was the young adults of 15-39 years who were most likely to be affected by misfitting footwear. Some patients went so far as to make their own alterations to their surgical footwear in order to improve the comfort.

4 Most people had been offered a choice of colour for their surgical footwear although often this only included black or brown. If the range of colours available were

extended to include tan and a beige or neutral colour with red or white for children then most patients would be satisfied.

5 In all 19% of patients were not satisfied with the style of their footwear. This was most commonly the complaint of the young adult age-group, of whom 36% of men and 41% of women were dissatisfied. For many people some fancy stitching or pattern across the front of their shoes or the addition of a strap or buckle would be sufficient to improve the style. Fashion conscious ladies felt that some of the more modern designs of ordinary footwear could and should be incorporated into their surgical footwear and if possible a few styles from which to choose.

6 Some 13% of all patients over 10 years could not put on their own surgical footwear, a further 19% said that they had difficulties. The people most likely to be affected are those suffering from strokes, a spastic condition and spina bifida.

7 There were 11% of patients who were not satisfied with the wear they got from their surgical footwear (14% of men and 9% of women). The children's footwear was more likely to be affected than the adults; 17% of children can only expect one to two months wear from their surgical footwear.

## PART THREE — Patients' opinions of the supply of their surgical footwear

### 13 Overall satisfaction with the supply arrangements

In order to put the incidence of dissatisfaction into a perspective, let us first look at the overall assessment given by patients concerning their general level of satisfaction or dissatisfaction with the arrangements for the supply of their surgical footwear. This assessment was made after the informant had been given an opportunity to talk about all the various aspects of the supply procedure and was, therefore, able to give a considered overall opinion. (For readers unfamiliar with the supply of surgical footwear this is outlined in Chapter 1.)

All informants were asked to give details of the procedure and arrangements for the supply of one particular pair of surgical shoes or boots, their last pair at the time the sample was drawn. They were asked about consultations with a hospital doctor, measurements and fittings, the time taken to supply their footwear and any inconveniences which they experienced. After discussing all the various aspects of the supply of their footwear informants were asked:

*Thinking of all you have just said about the arrangements for supplying this pair of shoes/boots were you... very satisfied, satisfied, dissatisfied or very dissatisfied with these arrangements?*

Most informants (87%) were satisfied with the supply arrangements (including 40% very satisfied), while the 13% dissatisfied included 3% who were very dissatisfied. First time wearers expressed similar degrees of satisfaction as those with replacements, and there were no differences in the distribution of men compared with women. There is however an age difference, as can be seen from Table 32. The current procedure for supply, explained briefly in the introductory chapter, seems to be causing more dissatisfaction amongst the younger age-groups than the older patients. Of the parents of children under 15, 21% were dissatisfied or very dissatisfied with

Table 32 Overall satisfaction with supply arrangements by age

Age	Overall satisfaction with supply arrangements				
	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied	Base
0-14	32	47	15	6	257
15-39	29	52	13	6	194
40-64	41	49	9	1	521
65 & over	48	42	8	2	568
All ages	40	47	10	3	1,540

the supply arrangements as were 19% of patients aged 15-39, compared with 10% of the older people interviewed. Just under half of the 65 and over group were very satisfied.

In terms of working status the people who are most committed during the day are more likely to be dissatisfied with the arrangements than those who can arrange for a certain amount of flexibility. The lowest proportion of those who were very satisfied with supply arrangements was found to be those working full-time (34%), followed by sick and handicapped and part-time workers (40% and 41% respectively), compared with 45% of housewives and 48% retired. At the other end of the scale, 1% of the retired were very dissatisfied compared with 3% of the other groups. Clearly full-time workers have to take time off to attend clinics and fittings and the permanently sick and disabled are more restricted in their mobility and may have to wait for a particular day when they can be picked up by an ambulance or make some other special arrangements to attend the hospital. If they have to make repeated visits this could cause them considerable difficulties. A later chapter covers in much more detail the inconveniences which the supply system imposes on certain patients; here we look at the main reasons given by those patients who were, on the whole, dissatisfied or very dissatisfied with the general arrangements for the supply of surgical footwear.

## 14 Reasons for being dissatisfied overall with the arrangements for the supply of surgical footwear

### 14.1 Time taken

By far the most common reason given for being dissatisfied with the supply arrangements was the length of time taken to make the patients' footwear. For some people this was just the total time taken and for others extended delay between certain stages caused them particular discontent. Of the patients saying they were dissatisfied or very dissatisfied with the arrangements 75% gave this as their main reason. Delay was mentioned by both men and women of all ages. During the interview we collected a lot of information about the time taken to get the surgical shoes or boots made, the number of stages involved, etc and whether or not the informant felt the delays were reasonable – this information is analysed in Chapter 16 where the subject of time taken is covered more fully.

Other reasons given amounted to only 15% or less of all the people saying they were dissatisfied or very dissatisfied with the supply arrangements, but many of these concerned problems which seemed to exacerbate the delay in supplying the footwear. The answers given to this question were understandably of a much broader and less concise nature than the reasons given for dissatisfaction with the footwear itself. To attempt a formal statistical analysis of the answers into codes would be inappropriate as many informants implied a combination of reasons for their dissatisfaction with the supply arrangements. Instead, broad categories are noted for those answers which were more than simply *It took too long*. Examples of the sorts of comments made by informants are included in each category covered in the following three sections.

### 14.2 The system

Several people criticised the complexity of the supply system and its many stages which only served to frustrate their efforts to obtain correctly fitting surgical footwear within a reasonable time.

New patients have to visit their own general practitioner to be referred to the hospital orthopaedic surgeon or consultant. They are then referred to the fitter who measures their feet. One or more subsequent fittings may be necessary before the footwear is complete and collected by the patient. Each stage involves contacting the appliance officer at the hospital, in some cases by 'phone but in others in person, who might only be accessible for a limited period each week due to other work commitments or part time work. There may be a delay before an appointment is made either with the hospital consultant or with the fitter from the suppliers, and appointments can generally only be made on certain

days. The patient may have to wait for a card to arrive confirming the appointment. Several such appointments may have to be made in this way to arrange visits to the consultant, visits to the fitter for measuring and fitting, and then finally collection.

Each visit involves a journey to the hospital which causes expense for some people or involves a lot of time wasted. It is often tiring for older patients who may have to catch several buses to get to the hospital. Infirm patients said they had to wait for a particular day when the ambulance could come and take them to the hospital, which extended the supply period. One person commented that she could have an ambulance to take her for fittings but not to collect the finished shoes and this caused her considerable inconvenience. Hospital appointments are arranged for the daytime involving time off school or work which may reduce earnings.

Several complaints or suggestions were made by our informants in an attempt to reduce the number of stages involved. Some people would prefer to deal directly with the firm to avoid the 'middle man' stage of having to contact the appliance officer each time and wait for her to make the arrangements. This was particularly of interest to people who lived nearer the firm than the hospital. These were presumably people who felt that the fitter was capable of supplying them with correctly fitting footwear and therefore, did not require the attention of the hospital consultant on a regular basis. For these people, having to go via the hospital system each time they wanted new surgical footwear was a cumbersome procedure. A few people even had to go back to their GP if it had been more than a year since they had ordered a new pair of surgical shoes, and start the system again.

Some few people objected to having to wait to see the consultant each time they wanted new shoes when all he appeared to do was to sign the form. Others complained about the lack of availability of the consultant and that they would like to have seen him more often, at fittings for example.

Additional delays occurred when footwear was apparently mislaid and could not be found at the supplier or the hospital. Sometimes a new pair had to be made. Delays occasionally occurred when the appliance officer was too busy to send off a card straight away telling the patient to come and pick up his or her shoes.

### 14.3 Ensuring a good fit

Quite a number of people who complained of ill fitting boots and shoes felt that part of their problems were

caused by the system for the supply of surgical footwear. They criticised the remoteness of the shoemaker from the patient as all instructions to the shoemaker are passed on via the fitter. They also commented on the lack of liaison between the fitter and the consultant during the prescription and fitting stages or even of disagreement between the fitter and consultant which left the patient somewhere in the middle, and usually dissatisfied. Some people whose footwear was not checked finally, complained that they had not realised that their shoes did not fit until they got home and they would not have accepted the footwear had they been given a chance to try it on at the hospital. Other criticisms of supply arrangements included not having any fittings, seeing more than one fitter, (one person saw three different fitters whilst getting one pair of shoes made), or general feelings that the measurements taken were very sketchy and inadequate.

#### 14.4 Attitudes of service personnel

No questions were asked about treatment by service personnel but some half a dozen informants spontaneously complained about the attitude of some of the people they had to deal with. Generally these criticisms concerned an indifferent or non-caring attitude to patients' problems or an unhelpfulness or unwillingness to speed up the system.

#### 14.5 Summary

These comments are all patients' opinions. It was not possible to check whether all the criticisms were justified, in particular the reasons given by patients who felt they had been supplied with ill fitting footwear. This would

require examination by an independent authority. All we can say from the survey is that a small proportion of patients, probably only a few percent, are sufficiently dissatisfied with the procedure for making their surgical footwear, to criticise strongly the lack of service, the individuals involved and the whole system for supply. Because the footwear is 'free' to patients within the National Health Service, the usual customer/supplier relationship does not exist between the patient and either the manufacturer or the hospital appliance service. This appears to frustrate some patients' efforts to obtain satisfactory footwear within a reasonable time. Patients cannot 'shop-around' to find the best supplier for their needs and therefore their complaints do not carry the same weight as a person who can threaten to withdraw his or her custom.

This section has been concerned with setting the scene of patients' opinions on the supply of their surgical footwear. Overall, some 13% of patients are dissatisfied or very dissatisfied with the arrangements. Their main reasons are the length of time it takes to supply their surgical shoes or boots from start to finish, the complexity of the supply system and its related inconveniences. These topics are analysed further in the following chapters from data collected at questions which were designed to describe the various elements of the supply system and the time periods between each stage, the involvement, if any, of a hospital consultant or surgeon and the opinions of patients on the time taken to supply their surgical footwear and any other inconveniences caused whilst their footwear was being made.

## 15 How the stages of the supply procedure affect patient satisfaction with the supply of their surgical footwear

This chapter describes the various stages through which the sample of patients interviewed received their surgical footwear. The standard procedure is described in the introductory Chapter 1, for those unfamiliar with the way surgical footwear is supplied.

We found in Chapter 14 that the complexity of this supply procedure was one of the major sources of dissatisfaction amongst surgical footwear patients. Because of this, any of the elements of the supply system, described in the following sections, which were felt might contribute to the complexity of the system have been analysed by the overall level of satisfaction expressed by patients about the arrangements for supplying their surgical footwear. If there are any particular aspects of the system which contribute more to the complexity than others, as far as patients are concerned, then they should show up in this analysis.

### 15.1 First pair or replacement

Not everyone goes through all the stages described in Chapter 1. Patients receiving replacement footwear (81% of the sample) could start with the hospital doctor who would give the patient a checkup and maybe change the prescription of their footwear. However, they are more likely to enter the system by contacting the appliance officer who will arrange for a new pair of boots or shoes to be made up to the existing prescription. New patients (19% of the sample) are usually referred initially by a GP but if they were already being treated at the hospital, could go straight from a regular appointment to see the fitter. Very often patients receiving replacement footwear have no measurements or fittings and some may not even try on their surgical footwear before receiving them, whereas first timers will normally be involved in several visits to the hospital for consultations, measurements and fittings.

One might expect the arrangements to become easier for a routine ordering of a replacement pair of surgical shoes or boots but this would not seem to be reflected in the level of dissatisfaction expressed by patients. Overall, roughly the same proportion of patients receiving surgical footwear for the first time were dissatisfied with the supply arrangements (14%) as people receiving a replacement pair (13%). It would seem that the elements of the supply system which cause dissatisfaction initially are still present at the re-ordering stage.

### 15.2 The referral

Most patients receiving surgical footwear for the first time were referred by their general practitioner to a hospital doctor dealing with surgical appliances. A few

people were referred straight to the fitter by a physiotherapist from whom they were having treatment. Some children at special schools did not go to the hospital for their footwear; arrangements were made through the school and the children were seen by the fitter at the school.

Of the sample of first timers 42% were specially referred to the hospital for surgical footwear. The remaining 58% were already having treatment. Slightly more of the specially referred people were dissatisfied or very dissatisfied with the arrangements (19%) than were those already under treatment (11%).

The number of stages involved are reduced for patients already under treatment as they miss the initial visit to their own general practitioner, the waiting time for an appointment and a special visit to the consultant. Instead, they pass straight from their regular appointment to seeing the fitter. It is also probable that knowing the hospital system and their own arrangements for visits helps to alleviate some of the inconvenience of having to obtain surgical footwear through the hospital.

### 15.3 Measurements and fittings

Most patients had their feet measured by the fitter, 86% of the first timers and 61% of those receiving replacement footwear. For the remainder of the first timers 4% had a cast taken, 9% had both measurements and a plastercast and 1% had no measurements taken at all. Of the patients receiving replacement footwear 2% had a cast taken, 2% had both done and 35% had no measurements taken. If we compare all the people who had some form of measurement with those who had no measurements then the former 'measurement group' are more likely to be dissatisfied or very dissatisfied with the arrangements (18%) than the latter 'no-measurement group' (10%). The inclusion of measurements, again, adds another element to the supply system.

However, no such evidence was found at the fitting questions. The same proportion of people were dissatisfied or very dissatisfied with the arrangements (13%) whether or not they had fittings. Perhaps, once people have had to go up to the hospital for measurements and consultations, to attend an additional time for fittings does not add unduly to their dissatisfaction. Most people only had one fitting (83%), 12% had two fittings and the remaining 5% had three or more. We found a few isolated cases of six or eight

### 15.4 Completed footwear

Most people (81%) tried their shoes or boots on before



taking them home. Nearly all of these people (97%) had their footwear checked by someone to see if their footwear fitted. Usually this was the fitter but occasionally the hospital consultant, the physiotherapist and even the appliance officer was mentioned as having checked to see that the surgical footwear fitted the patient. For most people (88%) their footwear was ready for wear once it had been fully made up, however, the remaining 12% had to have further alterations made. This was most commonly because the footwear was too tight or too small, affecting about one third of the shoes needing alterations. For other people their shoes were too big or incorrectly built up or alterations were made to the inside of the shoe. A few had the fastening changed.

Both men and women had to have alterations made, 14% women and 10% men. Fewer children had footwear needing alterations once fully made up than other age-groups. Of the 15-39 year olds 17% had to have their footwear altered along with 12% of the 40-64 year olds and 13% of the 65's and over, compared with only 9% of children.

The relationship between whether or not alterations are carried out and other factors in the procedure such as fittings, measurements, etc follows much the same pattern as described for those people who complained of ill fitting footwear (Chapter 7); whether or not the patient had fittings or whether or not his feet were measured did not affect the need to have alterations made. However, first timers are a little more likely to have alterations made (15%) than patients receiving replacement footwear (12%).

It was reported in the earlier Chapter (7) that first timers seem to experience more difficulty in obtaining well fitting footwear than patients who have been wearing surgical footwear for a number of years. The result here adds support to that conclusion. However, the differences are slight and there are still a considerable number of patients, who had had surgical footwear before, requiring alterations after their footwear had been made up.

#### 15.5 Delivery of surgical footwear

When their shoes or boots were ready most people took them away after their final appointment. Some patients, about 10%, had their footwear sent to them by post and a further 5% were fortunate enough to have their surgical shoes or boots delivered by the firm or the hospital. However, one person felt this to be a disadvantage because he had not been given the opportunity to try on the shoes as he was out when they were delivered and he subsequently had to take his shoes back because they did not fit.

#### 15.6 Return of unsuitable footwear

In all, 14% of patients had to take their footwear back after getting it home because there was something wrong. By and large this was because patients were unhappy about the fit or comfort but a small proportion (6%) gave 'suspect' workmanship as the reason.

Comments were made such as the heel fell off, the shoes split after seven to ten days, nails sticking up, caliper hole on the wrong side. A third of all patients taking footwear back did so within a week, the proportion being returned within a month was 75%. The other 25% waited longer than a month to return their footwear - in some cases it was six months after receipt.

Once again we find that first pair patients are more likely to have problems which necessitate the return of the surgical shoes than established surgical shoe wearers, which is not unexpected as most problems were associated with fit and comfort. Twenty per cent of first time patients had to take their footwear back compared with 13% of longer term wearers. Whether or not the patient had fittings or measurements did not affect the incidence of returned footwear.

Whether or not patients had to take their footwear back also seems to be a significant factor in making the overall assessment of dissatisfaction with the surgical footwear supply service. Twenty six per cent of the people who had to take their footwear back said they were dissatisfied or very dissatisfied overall with the supply arrangements compared with 11% of those who did not have to take them back. The additional complication of having to have further alterations or even new footwear made adds to the time taken to supply surgical footwear, involves additional journeys to the hospital and frustrates the patient in his desire to obtain well fitting footwear, particularly if he is seriously in need of a new pair of shoes.

#### 15.7 Inconvenience caused by the supply arrangements

Throughout this part of the report we have tried to illustrate the various aspects of the system which lead patients to express dissatisfaction with the supply arrangements. Many of these points can be summarised by looking at the answers to a question asked of all patients:

*Did you find that in general the arrangements for the supply of these surgical shoes/boots caused you any inconvenience?*

Some 18% of patients said yes.

**Who is inconvenienced.** This included men, women and children of all age-groups. Both first timers and patients receiving replacement footwear were inconvenienced, affecting slightly more of the replacements (19%) than the first timers (13%).

If we look at the patients receiving surgical footwear for the first time, it is interesting to note that 20% of those who were specially referred said that they had been inconvenienced by the supply arrangements, compared with only 9% of those who were already under treatment.

This is in line with the result quoted in section 15.2, where we found that new patients who were unfamiliar with hospital procedures and who had followed all the stages of referral were more dissatisfied with the arrangements than those who could come into the system part way



through and would also have become accustomed to hospital procedures through their previous regular visits.

Another group of people who are likely to be inconvenienced are those with a busy, daily life involving a schedule of commitments such as people in employment or at school etc. Hospital visits involve taking time off during the working day and this can cause great inconvenience particularly if several visits are required. Twenty three per cent of surgical footwear patients in employment and 27% of school children and those in full time education told us that the supply arrangements caused them inconvenience. This compares with 15% of housewives and only 12% of people who were retired or not working because they were permanently sick or disabled.

**What causes inconvenience.** Where applicable, all informants were asked to describe the ways in which they had been inconvenienced.

One of the most frequently reported reasons was having to take time off work to attend for clinics, fittings, etc. This was mentioned by about one third of all informants. Another source of inconvenience which was mentioned by about one third was that of having to make long or special journeys or repeated journeys to the hospital. A smaller proportion of people (14%) mentioned the expense involved in travelling and a few disabled patients complained of the inconvenience of having to wait for ambulances to take them to hospital. A few other patients complained of the inconvenience of using public transport for their journey especially if it involved several stages.

Other comments included a group of about eight per cent of patients whose inconvenience was caused by a breakdown of communication within the supply system. For example a card was sent to say that the footwear was ready but when the patient arrived at the hospital to collect the shoes they were not ready; other patients

arrived to see the fitter but he did not come. Sometimes completed footwear was laying waiting at the hospital for a long time because the card to inform the patient had got lost, and occasionally footwear was mislaid.

Some patients complained of the time they had to spend waiting at the hospital for their consultation or fitting. A few patients felt that they were being an inconvenience to other people because they had to rely on their help, for example, to look after children or accompany them for appointments because of their impairment. A substantial proportion of patients (20%) mentioned at this question that they had no other suitable shoes to wear whilst new surgical footwear was being made. This whole topic of the number of pairs of surgical shoes available to patients is covered in part three of this report along with other factors which concern the availability of surgical footwear.

These inconveniences experienced by patients during the supply of their footwear played a large part in determining their overall level of satisfaction with the surgical footwear service. Of the people who were dissatisfied or very dissatisfied overall over half (56%) said that the arrangements had caused them inconvenience, whereas this affected only 12% of those people satisfied overall.

In conclusion, the people most likely to be dissatisfied with the procedures for supplying surgical footwear are those with busy and committed lives. Patients who were in employment or at school felt most inconvenienced by repeated visits to the hospital involving whole days or half days away from their work. Some form of preferential treatment for these people would considerably reduce this area of dissatisfaction.

However, by far the most frequently reported reason for dissatisfaction with the surgical footwear service was the time taken to get new shoes and boots made. This is the subject of the next chapter.

## 16 Time taken to supply surgical footwear

**16.1 Time spent waiting for first hospital appointment**  
Patients having surgical footwear made for the first time, who are not already under treatment at the hospital, start the supply procedure by being referred to the hospital by their own general practitioner for a consultation with the orthopaedic surgeon or other specialist. We asked these patients how long they had to wait for their first appointment with the 'hospital doctor'. Over half the patients (63%) were seen within one month, 31% within a couple of weeks. A further 19% had a wait of between one and two months and 11% between two and three months. The remaining 7% had to wait three months or longer. This included a couple of children as well as some of the adult patients. After their consultation just over a third (35%) of the patients who saw a hospital doctor went straight on the same day to see the fitter to have measurements taken etc. A further 13% saw the fitter within one week after seeing the hospital doctor, 18% within one or two weeks and a further 19% between two weeks and a month. Thus 85% were seen within one month from their specialist appointment. The remaining 15% had to wait longer than a month for this stage and 9% waited two months or more.

### 16.2 Time taken to make surgical footwear

**Patients who had measurements taken or cast made.** The Department of Health stipulate that surgical footwear should be completed within eight weeks from the date of the order. It was not possible within the confines of the survey to check each individual order from patient records so in this section the time periods are analysed from comparable data collected during the interview; that is, for all patients having measurements taken we asked for the time between measuring, usually the point at which the fitter writes out the order, to the time when the informant received the footwear. For some patients there may be a delay between the completed shoes or boots arriving at the hospital and the patient actually receiving them which will have been included in these time estimates but from the patient's point of view the time periods quoted in this section relate to the time taken to make surgical footwear.

Table 33 shows the time taken to make surgical footwear for different age-groups for all patients whose feet were measured or a plaster cast taken. The third column shows the proportion of patients receiving their footwear within two months, or more exactly 9 weeks 6 days. This includes the 8 weeks completion time stipulated by the Department and a further arbitrary 13 days to allow for delivery to the patient from the hospital. Periods of 10 weeks have been included in the next column (2-3 months).

Suppliers are asked by the Department to give priority to children when making surgical footwear and from Table 33 we see that children get their footwear supplied more quickly than adults. Just over a third got them within a month of their feet being measured, just over threequarters within two months and 92% within three months. However, when one considers how fast children's feet can grow, any time delay could considerably shorten the effective fitting life of the boots or shoes, particularly in the cases where the footwear takes four months or longer to make up.

**Table 33** Time taken to supply surgical footwear from having measurements taken to patient receiving footwear

Age	Time taken to supply footwear					Base
	Up to 1 month	1-2 months	Up to 2 months	2-3 months	4 months & over	
0-14	% 35	43	78	14	8	211
15-39	% 19	39	58	26	16	127
40-64	% 20	44	64	18	18	304
65 & over	% 25	39	64	18	18	403
All ages	% 25	41	66	18	16	1,045

The adults, not surprisingly, are generally expected to wait a little longer than the children. The 15-39 year agegroup seem to be the most affected with only 58% receiving their footwear within the two months period, compared with 64 to 66% for the other age-groups.

Another factor which might affect the time taken to supply footwear is whether the patient is having surgical footwear made for the first time or not, however, very little difference was found. Considering only patients whose feet were measured, 69% having surgical footwear made for the first time received their shoes or boots in two months compared with 64% receiving replacement pairs.

Some children who attend special schools for the handicapped get their footwear supplied directly through the school rather than through the hospital and we wondered whether this might result in a faster service but this was not the case. Of the children who had measurements taken 82% received their completed boots within two months of their feet being measured compared with 70% of the children making their own arrangements through hospitals. However, the advantage for children being supplied through their schools is that they do not have to take time off to make hospital visits for fittings, etc.

**Patients who did not have any measurements taken.** This primarily concerns patients receiving replacement footwear as in the main the first timers had some form of measurement taken, apart from a few

isolated cases. One might expect that footwear which is just made up to an already existing order can be completed more quickly than shoes or boots which have to be made up to a new specification. This does not seem to be the case.

When a patient requires replacement surgical footwear he or she contacts the appliance officer who writes out an order to the firm which supplies the footwear. We noted the time delay, as remembered by the patient, from the point at which the patient contacted the appliance officer to place the order to the point at which the patient received his completed surgical shoes or boots. This time period is very similar to that of footwear made up to new measurements as quoted in the previous section. The time periods are not strictly the same but they are the nearest estimate we can make from the date of the order to the date of delivery to the patient. Some 63% of patients reordering received their footwear within two months, a further 18% between two and three months and 19% took four months or longer.

There are insufficient numbers of people to make accurate comparisons for different age-groups but the data indicate a similar pattern to that found for patients having measurements taken. Children are the best served, about one third of them received their footwear in one month, over three quarters by two months; young adults are the least well served, just over half of their footwear was ready within two months.

In summary, we must point out that the ability to remember time delays accurately varies between individuals and therefore we cannot quote precisely the time taken to make surgical footwear. However, the interviewers are trained to give informants clues in order to help them remember events and hence give the best estimates possible. We can say with reasonable confidence that in general two thirds of patients have their footwear supplied within the two month period except in the case of children where the figure is nearer three quarters.

**Size of supplier.** It was suggested that the smaller suppliers may give a better, or worse, service than the larger companies and so comparisons were made based on the turnover in one month in 1974 of the value of surgical footwear made for the National Health. (These figures were obtained from the supplies division of the Department of Health and relate to 'A' category items).

As a limited number of suppliers were involved in the survey we divided them into two groups, those with an annual turnover of £10,000 or more and those with a turnover of less than £10,000. The making time periods are similarly distributed whether or not the patient has any measurements taken and so for ease of presentation have been grouped together in Table 34.

Table 34 illustrates quite a large difference in the time taken to supply surgical footwear between the large and the smaller organisations, with the larger firms

Table 34 Time taken from ordering to receiving surgical footwear by size of supplier

Supplier size (turnover in one month)	Time taken to make footwear				
	Up to 1 month	1 - 2 months	Up to 2 months	2 - 3 months	4 months Base & over
£10,000 or more	% 29	43	72	15	13 764
Less than £10,000	% 17	41	58	21	21 707

completing 72% of their footwear within two months compared to only 58% completed by the smaller firms. It must be pointed out that the data on which companies were grouped only relate to one month's turnover but this was chosen by the DHSS to be a fairly typical month and should be sufficient to distinguish between the large and the smaller firms.

As this difference between the larger and smaller firms is quite significant we looked at other factors of the surgical footwear supply service which may be sacrificed in favour of speed, such as fit and comfort, whether alterations had to be made or footwear returned, whether the footwear was well made or not in the patient's opinion, and so on. For all these factors mentioned there was no more than a few percent difference between the service provided by the larger firms and that given by the smaller firms and certainly not enough to claim that the fit or quality of the footwear is being sacrificed in favour of speed. Overall, 83% of patients supplied by the larger firms were satisfied with their footwear compared to 82% supplied by the smaller organisations and 87% of the larger firms customers were satisfied with the service compared to 86% of the smaller firms patients. These are negligible differences. There was also no difference between the proportions of patients who have insufficient pairs.

### 16.3 Is this time delay reasonable?

In the last section we reported the actual time periods that patients had to wait whilst their surgical footwear was being made. Depending on patients individual needs and circumstances different waiting times can appear reasonable to different people. We, therefore, asked all patients whether they thought that the time taken to supply their surgical footwear was reasonable or not and if so whether there were any particular stages which took too long.

Some 25% of all patients felt that the time taken to supply their surgical footwear was not reasonable. This included fairly equal proportions of men and women but the difference between age-groups is quite marked as shown in Table 35.

Children and young adults are clearly less tolerant about the time they have to wait for their surgical footwear than the older patients. There were 18% of children or their parents who felt that one month was unreasonable, although only a few per cent of the adults felt that this wait was not reasonable. However, a quarter of the 15-39 years age-group felt that two months was unreasonable compared with only 11% and 12% of the older adults and the elderly. By the time patients had to wait more than

Table 35 Whether time taken to make surgical footwear is considered reasonable or not for patients of different age-groups

Age	Time taken to make footwear									
	Up to 1 month		Over 1-2 months		Over 2-3 months		Over 3 months		All times	
	reason- able	not reasonable	reason- able	not reasonable	reason- able	not reasonable	reason- able	not reasonable	reason- able	not reasonable
0-14	% 82	18	52	48	28	72	23	77	57	43
15-39	% 97	3	74	26	60	40	33	67	67	33
40-64	% 99	1	89	11	69	31	58	42	82	18
65 & over	% 100	0	88	12	72	28	47	53	81	19
All ages	% 95	5	81	19	63	37	48	52	75	25

three months most thought this delay not reasonable. Three quarters of the children felt this was unreasonable which is not surprising as their feet would have grown since the measurements were taken. Two thirds of the younger adults and half or slightly less of the older adults also felt more than three months unreasonable.

This is also reflected in the disability groups which most commonly report that the time delay is unreasonable. About half the spina bifida patients thought the time delay was unreasonable along with approximately one third of the remaining congenital complaints, whereas only about one fifth of arthritic patients felt the time delay unreasonable along with one fifth of the post traumatic patients.

This result is not unexpected as the children and young adults are the most active of the surgical footwear

patients and are wearing their boots or shoes all day and every day. They cannot afford to wait a long time for a new pair to be made when their previous pair is worn out and in some cases they are left without a suitable spare pair. This point is discussed further in the chapter concerning availability of surgical footwear.

All the people who felt that the time taken to supply their surgical footwear was unreasonable were asked whether there were any particular stages which took too long. A few percent of people mentioned stages at either end of the supply procedure, waiting for their first appointment with the hospital doctor or having to get alterations made after their footwear had been completed, but by far the most frequent complaint related to the actual manufacturing time from placing the order, or having the feet measured, to receiving the finished shoes or boots.



## 17 Role of hospital doctor

### 17.1 Involvement of hospital doctor during the supply of the sampled pair of surgical boots or shoes.

**First time patients.** Patients receiving surgical footwear for the first time almost always have a consultation with a specialist or other qualified medical person at the hospital who decides what features are necessary for his patient's surgical shoes or boots and writes out a prescription. Some 7% said they had not seen a hospital doctor at all but in some cases they had seen a physiotherapist. A few people said that they did not see anyone at the hospital apart from the fitter and that the arrangements for this visit had been made by their own general practitioner.

Of the patients getting their first pair of surgical shoes or boots made 63% saw the hospital doctor once only and that was for their initial consultation; 24% saw the doctor twice, usually once before the measurements were taken and once after the shoes or boots had been made up to check that they were correct; a small proportion, 6%, saw the hospital doctor three more times which usually included a check whilst having fittings.

**Replacement footwear.** After patients have been wearing surgical footwear for some time their condition can become stabilised and it no longer becomes necessary for them to see a doctor each time they want new surgical footwear. Of the patients receiving replacement footwear 62% did not see a doctor at all during the supply of their last issue of surgical footwear; 29% saw a doctor once only before their boots or shoes were made; two per cent saw a doctor once only but at some other time, either during the fitting stages or after the footwear had been made up. The remaining 7% saw a doctor on two or more occasions.

### 17.2 Regular visits to hospital doctor for replacement footwear

We asked the patients who were receiving replacement footwear how often they saw a hospital doctor concerning their condition. Table 36 gives this information for the different age-groups.

Table 36 Frequency with which patients receiving replacement footwear see the hospital doctor

Age	How often hospital doctor seen				Base
	no regular time	under 6 months	6-11 months	1-5 years	
0-14	% 16	69	15	-	226
15-39	% 61	17	16	6	174
40-64	% 70	19	4	7	436
65 & over	% 78	13	5	4	414
All ages	% 61	26	8	5	1,250

Children are much more likely to be seen regularly by hospital doctors for replacement footwear than any other age-group, and with greater frequency.

There are 16% of children who are not seen regularly, while nearly 70% are seen regularly at intervals not exceeding 6 months, and the other 15% regularly at intervals not exceeding a year.

The older the patients, the less likely are they to have regular consultations. The proportion for the 15-39 year olds is about 60%, rising to 70% for 40-64 year olds, and almost 80% of the elderly claiming to have no regular consultations with a hospital doctor for replacement footwear.

The proportions of these three age-groups seeing a hospital doctor regularly for replacement footwear at intervals not exceeding a year are 33% for the 15-39s, 23% for the 40-64s and 18% for the elderly. However, that patients do not have regular consultations does not necessarily mean that they are seen less frequently.

### 17.3 Non-regular consultations with hospital doctors for replacement footwear.

Of the 16% of children who were not having regular consultations most had been seen within the last six months or a year. The adults did not have such frequent consultations; in fact a few people claimed that it had been over 30 years since they had last seen a hospital doctor. The proximity of the last visit for all patients aged 20 or over is shown below.

Of the adult patients not having regular consultations 60% had had one within the last four years rising to 86% within the last 10 years; 1% claimed never to have seen a doctor at the hospital at all, although, there is no way of checking whether this is true or just a case of poor memory or misunderstanding of the question.

Table 37 shows for those adult patients who had seen a hospital doctor at least twice and who claimed to remember both intervals, the time since they had last seen a hospital doctor by the length of time since the previous consultation.

Of the patients who could remember the last two occasions, less than a quarter had seen the hospital doctor during the previous year and within a year before that. If we look at the other end of Table 37, 2% had not seen a doctor for more than 10 years prior to the interview

Table 37 Last occasion saw hospital doctor by the time since previous consultation. (Patients who have no regular visits but who can remember the last two consultations).

Last time saw hospital doctor	The time before that			
	Up to 1 year ago	Over 1 to 4 years ago	Over 4 to 10 years ago	Over 10 years ago
Up to 1 year ago	22%	7%	4%	1%
Over 1 to 4 years ago	13%	11%	5%	5%
Over 4 to 10 years ago	7%	5%	8%	3%
Over 10 years ago	3%	2%	2%	2%

Percentages based on all persons applicable 464 = 100%

and their previous consultation had been more than 10 years before that.

**17.4 Would patients prefer to see a hospital doctor more frequently**

Some 12% of all the replacement patients said that they would prefer to see a hospital doctor more often. These were more likely to be patients with no regular visiting pattern or those who have to wait a year or so between appointments. This was also expressed by a greater proportion of the young adult age-group (15-39 years)

than either children, who generally saw the doctor quite frequently, or the older adults whose condition might be more stabilised.

Most patients who wanted to see the hospital consultant more often were concerned that their condition might be changing and hence altering the requirements of their surgical footwear. Several people complained of pain and they felt that an examination might alleviate their discomfort. Other people just mentioned the necessity to have regular check-ups to make sure that 'everything is all right'.



## 18 Summary - Patients' opinions on the supply of their surgical footwear

1 There were 13% of patients dissatisfied, overall, with the arrangements for the supply of their surgical footwear, and 3% very dissatisfied. Adults who work full time and the parents of children at school are more likely to complain about the supply arrangements.

2 The main reasons given for being dissatisfied with the supply arrangements were the time taken to make the footwear and the complexity of the supply procedure which often necessitates repeated journeys to the hospital, prolonged waiting times and time off work or school. This causes considerable inconvenience for people who lead active and committed daily lives.

3 More than three quarters of the children (78%) received their footwear within two months of order, however, 8% had to wait four months or longer. The group most affected by a prolonged wait for their surgical boots or shoes to be made was the young adults 15-39 years, of whom only 58% received their footwear within two months of order. Of this age-group 33% felt that the time taken to supply their footwear was unreasonable as did 43% of the children's parents.

## PART FOUR - Other topics relating to patient satisfaction with the surgical footwear service.

### 19 Availability of footwear

The third main source of complaint amongst surgical footwear patients concerns the number of pairs of suitable shoes or boots that they have available at any one time. Having insufficient pairs exacerbates the problems caused by boots and shoes wearing out quickly and then experiencing prolonged waiting times for getting new footwear made or having repairs carried out.

Often patients have to produce a pair of worn out shoes before they can order a replacement pair. If they have only one spare pair the patient may have to wear this pair all the time whilst he is waiting for the replacement. If the replacement takes a few months to make the original spare pair may be worn out or in need of a repair by the time the new footwear is ready. Once caught up in this spiral some patients only have one pair available for a large part of the time which means they have no spare footwear if their shoes or boots get wet or need repairing.

At some hospitals it also appears, from the comments informants made, that one new pair of surgical footwear per year per patient is all that is allowed. People whose surgical shoes or boots do not last twelve months are trying to cope with worn out footwear until they can have their allocation and patients who hardly wear their surgical footwear are accumulating unused pairs in their wardrobes. These points are developed further through this chapter in two main sections. Firstly we look at the number of pairs of surgical boots and shoes patients had at the time of interview and whether this is enough. Secondly we look at the frequency with which patients have new surgical footwear made and to what extent this keeps up with the rate at which their boots and shoes wear out.

#### 19.1 Number of pairs of surgical footwear in use by patients

We asked all patients how many pairs of surgical footwear they had for everyday use at the time of interview, including any at the repairers but excluding any that were worn out or outgrown, and whether they felt that this number was enough for everyday use. Table 38 shows the numbers of pairs of surgical footwear belonging to informants in different age-groups.

Table 38 Number of pairs of surgical shoes or boots available by age - all patients

Age		0 pairs	1 pair	2 pairs	3 pairs	4 or more pairs	Base
0-14	%	6	54	34	5	1	258
15-39	%	1	26	56	12	5	195
40-64	%	1	26	48	20	5	530
65 & over	%	*	34	46	15	5	574
All ages	%	1	34	46	15	4	1,557

\*Less than 0.5%

**No pairs at all.** One percent of the sample claimed to have no surgical shoes at all which fitted our description. Most of these were children whose only available boots were worn out or outgrown or both. A few parents commented that their children wore plimsolls or training shoes whilst they were waiting to get new surgical footwear made. A few adults also said that the only surgical shoes they had were practically worn out and were only being worn because they had no replacement.

**One pair only.** Table 38 shows that 34% of all surgical footwear patients have only one pair of shoes or boots available for everyday wear which includes any at the repairers but excludes any that are worn out or outgrown.

**First time patients.** Under half of these people (41%) had just received their first pair and would probably receive a spare pair in due course. Generally new patients are fitted with a pair of surgical shoes or boots, asked to try them for a few weeks and then if they are suitable a spare pair is made up to the same prescription. In this way most patients start off with two pairs.

We asked these first timers if they had been told whether or not they could have a second pair; 36% said they could, 1% said they could not, but 63% had not been told or did not know. We also asked these patients whether they had been told how to get new footwear when their old pair had worn out. Half the people claimed that they had not been told. When asked what would they do, a quarter did not know but the remainder said that they would contact someone at the hospital, the specialist or appliance officer or their general practitioner, which would eventually have the desired effect.

**People receiving replacement footwear.** As a general rule all patients should, by the time they are getting replacements made, have two pairs of surgical footwear available, one to wear and one as a spare. However, just over half the patients in the survey who only had one pair of surgical shoes were in fact receiving replacement footwear. Table 39 shows the number of pairs of surgical footwear available to patients but, unlike Table 38, only

Table 39 Number of pairs of surgical shoes or boots available by age - patients receiving replacement footwear only

Age		0 pairs	1 pair	2 pairs	3 pairs	4 or more pairs	Base
0-14	%	7	50	36	6	1	227
15-39	%	1	24	57	13	5	175
40-64	%	0	18	52	24	6	437
65 & over	%	*	17	55	21	7	418
All ages	%	1	25	51	18	5	1,257

\*Less than 0.5%

includes patients who have had surgical footwear before and are no longer in a position to ask for an additional, spare, pair.

Overall, 25% of surgical footwear patients who should have been issued with two pairs of footwear initially have now only one pair which is not worn out or outgrown, or of an old prescription and should not be worn for medical reasons. A further 1% claim not to have any pairs at all which fit this description.

Children are much more likely to be in this situation than adults; 7% of these children claim to have no suitable pairs of surgical footwear at all and a further 50% only have one pair. Some parents commented that their children were only allowed one pair of boots or shoes as it would be uneconomical to provide two pairs each time they needed a new size and so their footwear was replaced one pair at a time when their previous pair was worn out or outgrown. We have seen (Chapter 16) that it takes four months or longer to supply footwear in 16% of cases, and 18% take two to three months; clearly this delay must cause difficulties, particularly if the patient was only able to reorder a replacement at the point when his existing footwear was worn out, as is often the case. We were not able to ascertain the exact number of children who were in this situation but when one considers that by the very nature of the sample we were interviewing patients who had received a new pair of surgical boots or shoes fairly recently then the 7% who currently had no suitable pairs is probably a conservative estimate.

Younger adults are more likely to be affected by only having one available pair than the older adults. In the 15-39 year age-group 24% said they had only one suitable pair compared with 17% of the elderly.

Next we consider the patients who felt they did not have enough pairs of surgical footwear for everyday use and how many pairs they felt they needed.

## 19.2 Whether patients have enough pairs of surgical footwear

The number of pairs of surgical shoes required by patients is largely dependent on their life style. People who are not disabled as such and who lead a normally active working and social life need more pairs than someone who is mainly housebound and only goes out occasionally. To illustrate this we looked at the number of pairs owned by patients in various daily living situations and whether or not they felt they had enough surgical footwear. Table 40 shows the percentages of people who felt that the number they had available was insufficient, as opposed to being enough.

Overall 35% of patients felt that the footwear they had available was insufficient for their everyday needs. Over half thought that one pair was not enough but 94% would be content with four or more pairs.

The group most affected by insufficient suitable footwear are those employed in full or part time work, just under half of these people said that they did not have enough

Table 40 Number of pairs patients in different working situations had and considered insufficient

Working status	Percentage considering their present number insufficient				All persons at present
	1 pair	2 pairs	3 pairs	4 or more pairs	
School or full-time education	60%	24%	15%	*	43%
Full or part-time work	72%	50%	27%	*	47%
Housewife	49%	25%	9%	*	31%
Retired or permanently sick	52%	18%	7%	*	25%
All persons	56%	29%	15%	6%	35%

\*Insufficient numbers to proportion; see text

footwear to meet their needs. Just under three quarters of the working population who had only one suitable pair felt this was not enough as did half of those with two pairs. Even a substantial proportion (27%) of workers with three available pairs felt that this was not enough, and three out of the 19 workers were not content with their four pairs.

Some 43% of children, or their parents, feel that they do not have enough pairs and these form the next most common group to suffer from inadequate numbers of footwear; of those 15% were not satisfied with three pairs. Only three school children were interviewed with four or more pairs of whom one said he or she had enough.

Just under a third of the housewives did not have enough pairs as did a quarter of the retired or permanently sick. However, over 90% of both these groups who had three pairs were satisfied compared with only 73% and 85% of the workers and children with three pairs respectively.

## 19.3 Why patients need additional pairs

Everyone who felt they needed more pairs of surgical boots or shoes than they already had available was asked why. No new information was brought to light at this question other than that discussed elsewhere in the report. However, Table 41 does give some idea of the proportions of people complaining about the various implications of having insufficient footwear.

Almost half the people who said they needed more pairs felt they needed an extra pair for when repairs needed to be done on their footwear. Obviously this will affect those patients more who need to get their shoes repaired most

Table 41 Why patients need more pairs of surgical footwear

Reasons for needing more pairs of surgical boots or shoes	Percentage of all persons who have insufficient pairs
Need an extra pair for when repairs are carried out	48
To keep a pair for best/looking in reasonable condition	37
For a change when feet get hot, wet or uncomfortable	31
Different colours to match clothes	7
Other individual reasons	6
Because replacements not often enough	6
Base	537

frequently. This was covered in Chapter 10. Quite a lot of people mentioned keeping a pair in good condition for best, as wearing the same pair of shoes day in and day out would quickly make them look shabby. A very real problem is having a pair to change into when the patients feet got wet or even uncomfortable in hot weather. This was mentioned by just under a third.

Various other reasons were mentioned but it is interesting to note that at this question 6% of patients spontaneously said that their replacements were not made up frequently enough. This was the topic of a separate group of questions which are discussed in the next section.

#### 19.4 Whether patients have footwear replaced often enough

We have already mentioned that some hospitals only allow one new pair of surgical footwear per year. We had several comments, particularly from the younger adult patients that they had difficulty making their footwear last until the end of the year when they could re-order from their allocation of one pair per year. Their rate of wear has become greater than their rate of replacement and unless they are supplied with further additional pairs they will never have a spare. However, some elderly patients said that they could manage with one pair of surgical shoes as they only wore them for going outdoors which was not very often so their footwear lasted a lot longer than one year. Consequently some patients are accumulating footwear whilst others are in need.

To give a rough estimate of the proportions of patients in each category Table 42 shows the frequency of replacement in comparison to how long a patients footwear lasts. The data have been shown in such a way that everyone who gets a replacement pair at about the time that their old pair has worn out is included in the centre column. In the left hand column are the proportion of patients who get new boots or shoes made before they wear them out and so are accumulating footwear, whereas the patients included in the right hand column are wearing out their footwear at a faster rate than they are getting them replaced. These are the patients who are having to spend the last few months before getting a new pair made wearing worn out shoes.

Table 42 shows that, overall, there are about one fifth of patients who accumulate pairs of surgical shoes or boots, about the same number (one fifth) who are not keeping abreast of the rate of wear of their footwear, and about three fifths who manage to have their boots or shoes

replaced at about the same rate as they are wearing out. There is certainly an indication that if footwear was replaced as it was needed (bearing in mind the time it takes to get the footwear made) rather than by some allocation figure, a lot of the additional pairs required would be offset by the current surplus which suppliers would no longer have to make.

#### 19.5 Additional problems caused by insufficient pairs

Other factors which exacerbate the problems caused by having insufficient pairs of surgical footwear available include managing whilst replacement footwear is being made, particularly if the informant has to wait a long time, and managing whilst their surgical shoes or boots are being repaired.

During the interview, whilst discussing the procedure for having their surgical boots or shoes made, informants were asked whether the arrangements for the supply of their surgical footwear caused them any inconvenience. The predictable problems associated with having to attend the hospital etc were covered in Chapter 15. However, at this question 20% of people who had been inconvenienced said spontaneously that this was only because they had no surgical shoes to wear as their previous pairs were worn out. Informants who also commented about the procedural arrangements were not included in this figure and so 20% represents an underestimate of all the people who have difficulty managing whilst they are having new surgical footwear made.

However, we did ask everyone whether they were able to manage whilst their footwear was being repaired or whether it caused any problems. A quarter said that it caused problems and all these were associated with having insufficient or unsuitable alternative shoes or boots to wear whilst their main footwear was being repaired. Some 40% of the patients experiencing problems had only one pair available and 49% had two pairs.

Table 43 gives the distribution by age of those people who experience problems when their footwear is being repaired.

As we found before, the children and young adults have the most problems associated with insufficient footwear; 41% of children experienced problems whilst their footwear was being repaired, and 31% of the young adult age-group.

Table 42 The extent to which the replacement of footwear keeps up with the rate of wear

Length of time footwear lasts before it needs replacing (normal useful life of footwear)	When patients get replacement footwear			
	At shorter intervals than the useful life of their previous footwear (accumulating pairs)	At about the same time that footwear needs replacing	At longer intervals than the useful life of their footwear (not keeping up with rate of wear)	Base
Less than 6 months	% -	44	56	122
6-11 months	% 2	82	16	191
12-23 months	% 13	72	15	253
24-35 months	% 37	54	9	183
3 years & over	% 49	49	2	132
All persons	% 19	63	18	881



Table 43 Whether or not people of different age-groups can manage whilst their shoes are being repaired

Age	Can manage	Causes problems	Base
0-14	% 59	41	157
15-39	% 69	31	156
40-64	% 77	23	275
65 & over	% 84	16	436
All ages	% 75	25	1,024

Of the patients who could not manage whilst their surgical shoes were being repaired 16% were literally housebound as they could not walk without them. This represents about 2.5% of all people who wear surgical footwear. In the case of children, who comprised one third of these housebound patients, this can involve time spent away from school.

The remainder of patients with only one pair of surgical shoes or boots wear ordinary footwear whilst their surgical footwear is being repaired (31% of patients who experience problems). Children frequently wore plimsolls or training shoes as these were soft and could accommodate misshapen feet. Adults tended to cope with non-surgical footwear and one person wore wellingtons.

Almost a third of patients who experienced problems whilst their surgical footwear was being repaired said that although they could get about in ordinary footwear they had no spare surgical boots or shoes and this presented difficulties or even pain. Of this group 44% were children under 15 years.

Over half the people who experienced problems whilst their footwear was being repaired had another pair but they still found difficulty in managing. About 20% of those in difficulty said that their spare pair was uncomfortable or nearly worn out. A further 10% felt their spare pair to be shabby, and 12% commented that having repairs done caused unnecessary wear and tear on their spare pair particularly if the repair took a long time. (We shall look at repairs and the time they take, in more detail in the next chapter). Most people like to keep a pair of shoes looking in reasonable condition for best wear and everyone needs a spare for emergencies in case their feet get wet.

#### 19.6 How many pairs patients need

We asked patients who had said they did not have enough surgical shoes or boots (35% of all patients), how many pairs they thought they needed. Of those saying they needed more footwear 87% said they needed one extra pair, and 12% two pairs. Only 1% said they needed an extra three pairs or more.

Table 44 shows the number of pairs which would satisfy the needs of people in different occupational groups.

Those in employment say they need an average of 2.7 pairs at any one time, compared with 2.2 for housewives and elderly or sick people, and 2.0 for children.

Table 44 Proportion of people who would be satisfied with one, two, three, or four or more pairs of surgical footwear

Number of pairs patients would be satisfied with	Occupational groups				
	Workers	Children and those in full-time education	Housewives	Permanently sick, retired or unemployed	All
	%	%	%	%	%
1 pair	6	22	18	14	15
2 pairs	36	55	53	56	50
3 pairs	41	21	23	23	27
4 or more	17	2	6	7	8
Average number of pairs	2.7	2.0	2.2	2.2	2.3

Most workers say they need three pairs (41%), while 36% would be satisfied with two pairs. Only 6% are satisfied with one pair, although the data show that some 20% of workers have only one useable pair. Three pairs of shoes would satisfy the needs of 80% of workers.

A similar proportion (just under 80%) of children's needs would be satisfied by two pairs, as would 70% of elderly, and housewives.

We have seen that patients have very real problems when shoes have to be repaired or replaced if they have no surgical footwear, or only one pair to rely on. The rate of replacement should take into account both the activity of the wearer, and the length of time it is likely to take in order to replace the footwear, then the supply might be more effective. If replacement is based on these individual patient requirements then, as we found in section 19.4, the additional pairs which would need to be supplied to some patients should be offset to a great extent by the reduced number of pairs which would need to be supplied to other patients.

#### 19.7 Surgical footwear for other purposes

So far in this chapter we have been considering the availability of surgical footwear for everyday general use. During the pilot study several people commented that they would like to have other types of footwear made up to their surgical prescription. It was also known that occasionally people had been issued with specialised surgical footwear such as work boots and so a group of questions were included on this topic.

Some 3% of patients had been supplied with surgical footwear for purposes other than everyday general use. Just over 1% had been given work boots of which half had a protective toe cap. The remaining 2% had had surgical footwear made for a variety of purposes, including slippers or house shoes, sandals, warm boots for winter and a few people had specially made golfing or bowling shoes, one person having contributed to part of the cost. Some patients had been supplied with surgical footwear to be worn in bed, in addition to their everyday surgical shoes or boots.

When informants were asked whether the footwear that they had generally met their needs or had they ever felt that they needed surgical footwear for any other purpose, 79% said that their needs were generally met and 21% said

that they required surgical footwear for other purposes. Nearly half of the latter group wanted to have slippers or soft indoor shoes made up to their surgical prescription. We quoted earlier in the report that 45% of all patients took off their surgical shoes when they were in the house.

Generally these patients make do with wearing modified slippers or sometimes nothing on their feet but for many people this is unsuitable and some properly fitted surgical slippers would be preferable. People of all age-groups asked for slippers but in particular the need was felt by older people, who tend to spend quite a lot of time indoors, and young children, possibly to save wear and tear on the furniture and carpets.

Of the patients requiring footwear for other purposes 23% mentioned sandals or lightweight summer shoes. For some conditions lightweight footwear may be unsuitable but in many cases patients felt that their

normal surgical shoes were particularly heavy or hot and they needed a lighter weight shoe for the summer.

About 20% requested surgical footwear for sporting activities, usually the children or younger adults. Plimsolls or training shoes were mentioned quite frequently but also football boots and hockey boots. One child thought he may have to lose his place in the school football team as his parents could not find any boots to fit. Several adults mentioned that they need heavy duty footwear for walking or hiking or gardening. Footwear for participation in other sports included golf, riding, and bowls.

Other activities mentioned by people needing surgically designed footwear included warm winter boots mentioned by 14%, more attractive shoes to wear for parties or dancing were mentioned by 13%, work boots mentioned by 6% and wellingtons by 5%.



## 20 Repair of surgical footwear

When surgical footwear needs repairing this can be carried out free of charge through the NHS. The patient takes the boots or shoes back to the hospital who arrange for the footwear to be sent back to the supplier. Usually, the patient picks up the footwear from the hospital after it has been repaired. This procedure can take quite a time and so some patients prefer to pay for their own repairs to be done by a local cobbler. Occasionally, however, informants commented that their local cobbler would not repair surgical footwear so they had to use the hospital service.

We have already discussed some of the topics relating to wear and repair of surgical footwear earlier in this report. Chapter 10 covered the length of time surgical footwear lasts before it is in need of repair, in the context of wear and durability of patients footwear. In Chapter 19 we discussed the difficulties experienced by patients having to wait a long time to get footwear repaired when they have an insufficient number of pairs of suitable surgical shoes or boots to manage. Other problems experienced by patients whilst getting their shoes or boots repaired were also covered. The current chapter is concerned with the way in which patients have their surgical footwear repaired, the length of time it takes to get footwear repaired and whether patients are satisfied with the job when it is done.

### 20.1 How surgical footwear was repaired

Some 67% of the sample of patients interviewed had had repairs done to their surgical footwear. Most of the remaining 33% had not needed to have their footwear repaired but 7% of them wore out their shoes or boots so quickly that it was not worth having repairs done. This applied to children more commonly than the older patients. Of the people who had had repairs done 63% took them back to be repaired under the National Health Service and 37% had made their own arrangements.

Just under half of the people making their own arrangements did so because the NHS took too long. Of the people having repairs done privately 22% said that it was more convenient locally and 11% said that they did not mind paying as the footwear was free. They felt that they should not impose any more expenditure on the country when they could afford to pay themselves. Of the people getting their own repairs done 8% mentioned that it worked out cheaper to pay for local repairs than to spend money on the fares to and from the hospital for two journeys, one to leave the footwear and one to pick it up again. It is particularly interesting to note that 22% of these patients arranging for their own repairs said that they did not know that their surgical footwear could be

repaired under the National Health Service. We received comments such as:

*No one ever told me*

and

*I presumed there was no other way of getting them done.*

We asked the patients who had their repairs done under the National Health Service whether the arrangements caused them any inconvenience, 19% said yes. The reasons given were similar to those expressed by people who were inconvenienced by the arrangements for supplying surgical footwear; some people had difficulty managing whilst they were without a pair of surgical shoes, some people incurred a difficult or expensive journey and several people had to take time off work.

### 20.2 Time taken to repair surgical footwear

The main reason given for getting repairs done by private shoe repairers was that taking shoes or boots back to be repaired by the supplier through the National Health Service took too long. We received comments such as:

*... last time it was three months before I had them back*

and

*... the hospital takes two to three weeks, the shoe repairer only takes two to three days.*

Table 45 shows the distribution of the actual times taken last time the informants had their surgical footwear repaired, given separately for NHS repairs and private repairs.

Table 45 Time taken by National Health Service to do repairs compared with time taken by private shoe repairers

Time taken for repair	NHS	Private
	%	%
Same day	2	29
1 - 2 days	1	24
3 - 7 days	16	37
1 - 2 weeks	26	7
2 weeks - 1 month	37	2
Over 1 month	18	1
Base	632	370

There is quite a marked difference between the two services which is not altogether surprising when one remembers that in order to get footwear repaired under the NHS the patient generally has to take the shoes or boots back to the hospital to be collected by the fitter who takes them back to the firm. Occasionally patients post the footwear or deliver it directly to the firm. The repair is carried out by the shoemaker and the fitter returns the footwear to the hospital where it is collected by the patient. Delays could occur at any stage whilst the

footwear is waiting to be collected or brought back, quite apart from the actual repair, and so patients can be waiting for some time.

On the other hand, repairs done privately can frequently be carried out 'while-u-wait'.

Table 45 shows this quite clearly, 29% of private repairs were completed the same day compared with only 2% of NHS repairs, 90% of private repairs were completed within one week compared with only 19% of NHS repairs and 99% of private repairs were completed within a month compared with 82% of NHS repairs.

There is some tendency for the more involved repairs, for example soles and heels replaced, to be carried out under the National Health Service and the simpler repairs, eg heel tips only replaced, to be done privately. Some 70% of the National Health repairs were for new soles and heels compared with only 48% of the repairs carried out privately. However, there is still a considerable discrepancy between the time periods taken to get the equivalent repair carried out. If we look at these two examples the cumulative proportions of work completed within one week and one month are given in Table 46 for the private repairs and the NHS repairs.

Table 46 shows that even for a small job like a new heel only 28% of repairs were carried out by the NHS within one week, compared with 89% of private repairs. For a more involved repair such as a sole and heel 18% were carried out within a week by the NHS compared with 90% of the work done privately.

Table 46 Comparison between NHS and private service for two particular repairs

Percentage of repairs carried out	Repair to heels only		Repair to soles and heels	
	Private	NHS	Private	NHS
Within 1 week	89	28	90	18
Within 1 month	100	84	99	83

### 20.3 Change in fit after repair

We asked all patients who had had their surgical footwear repaired either privately or by the NHS,

whether the fit had changed; 9% said it had, 2% for the better and 7% for the worse.

As one might expect the fit was more likely to change after the more major repairs like a new sole and heel (12% changed) than for the smaller jobs such as a heel repair (4% changed). Whether the sole was leather or rubber did not seem to affect the likelihood of change. After the sole repairs the shoes or boots were more likely to get tighter, although some pairs did become looser, whereas those having the heel only repairs were more likely to claim they got bigger. However, the number of cases involved are so few that no firm conclusions can be drawn.

### 20.4 Whether satisfied with repair

By and large patients were satisfied with the way in which the repair was carried out, however, 7% said they were not satisfied.

Parents of children having their surgical boots repaired were more likely to be dissatisfied (8%) than the elderly adults (5%). Also, patients who had had their repairs carried out by the National Health Service were more likely to be dissatisfied (8%) than those who had gone privately (5%). However, the differences are very small for both these variables.

Just under a third of the people who were not satisfied felt their repair did not last long enough. This was more likely to be a complaint about a private repair than National Health Service work.

A quarter of those not satisfied said that the repair had made their surgical footwear uncomfortable including both National Health and private repairs. Just over a quarter felt that the repair had not been carried out as they had intended. This was more likely to apply to NHS repairs.

The remainder of answers covered a variety of complaints including the finish of the workmanship, some people complained of the glue from the soles coming off on to the leather uppers, the new soles marked the floor and the general appearance of the shoe was poor after it had been repaired.

## 21 Patients who have made a complaint about NHS footwear supply

We know that some surgical footwear patients felt sufficiently dissatisfied to make a formal complaint and so we included a group of questions to find out what proportion of users had actually made a complaint and whether this produced a satisfactory outcome.

Some 18% of all surgical footwear users said that they had made a complaint about either the footwear or the process of getting them, and men were just as likely to complain as women.

Parents of children under 14 were more likely to complain (27%) than older people, as will be seen from Table 47.

Table 47 Proportions of users in different age-groups who have complained

Age	Complaint made at some time	Base
Under 14 years	% 27	258
15-39	% 24	195
40-59	% 18	358
60-69	% 15	375
70 and over	% 12	371
All ages	% 18	1,557

There was little difference in the proportion of men complaining (17.4%) as compared to women (18.7%).

Since the question asked if a complaint had ever been made, it is not surprising that a higher proportion of those who had had replacement footwear said they had complained (20%) than first-time users (11%) – but the size of the difference does rather suggest that complaints are not entirely due to teething problems.

Some 68% of those who complained had done so within the year before interview, and a further 14% between one and two years ago, so that over 80% were comparatively recent, and most of these would refer to the current issue of footwear.

### 21.1 Cause of complaint

If we exclude the few informants who complained over five years ago, the biggest cause of complaint was fit and comfort, as can be seen from Table 48.

Comparing the complaints made within the previous year to those made between one and five years ago, there is little difference in the proportion of people complaining about fit and comfort and the time taken to get their footwear. There are lower proportions complaining about quality within the last year than one to five years,

Table 48 Cause of complaints made within last five years

Cause of complaint	Complaint made		
	Up to 1 year ago	1 to 5 years ago	In last 5 years
	%	%	%
Fit and comfort	48	46	48
Time taken to get footwear	31	35	32
Style and colour	9	12	10
Number of pairs	8	18	11
Quality	6	12	8
Time taken for repairs	4	4	4
Other reasons	14	15	14
Base*	192	66	258

\* Percentages add to more than 100 as some people made more than one complaint

but since quality involves durability it may be that new footwear has not been fully tested. There is an encouraging difference in the proportions complaining about the number of pairs available and the style and colour, indicating a reduction in those complaints in the more recent period.

Other reasons for complaint include those where caliper fittings or built-up heels etc. were made for the wrong foot, the shoes not supporting the foot, and shoes returned for alteration being 'lost', turning up in one case 10 months, and another a year, later on the unclaimed boots shelf.

### 21.2 To whom the wearer complained

Half the people complaining did so to the fitter, and just under a quarter to the hospital doctor or consultant; 16% complained to the appliance officer, and about 5% to the supplier, or the ward nursing staff, physiotherapist, or other hospital administrative personnel, including the hospital secretary. Four of our 270 complainers wrote to their MPs, and only two to the DHSS.

### 21.3 Satisfaction received

Asked if they were satisfied with the outcome of their complaints, in four cases nothing had yet been settled as the complaints were recent, but of the rest, just under a half said they were satisfied. Apart from complaints to the fitter, the numbers are too small to give reliable information as to the best person to get things done – but indications are that complaints to the nursing personnel and to the fitter are least likely to be settled satisfactorily (just under 40% produced a satisfactory outcome).

Complaining to hospital medical staff or ones own GP brought satisfaction to 45% of patients following this course of action, and going to the appliance officer satisfied half of these patients. However, going direct to

the supplier achieved satisfactory results for 10 out of the 15 people who complained directly.

#### **21.4 Dissatisfied patients who did not complain**

While 18% of footwear users actually complained, a further 9% said they had felt like making a complaint but hadn't actually done so. Asked if there was any particular

reason for this, 29% said they didn't know who to complain to; 29% said that they were not the sort to complain or they saw no point in complaining; 23% did not want to complain out of a sense of gratitude – the footwear was free or they felt that people were trying their best. The remainder gave various other reasons including 8% who did intend to complain.

## 22 Privately purchased surgical footwear

This survey was not designed to cover patients who only wear surgical shoes or boots which they have purchased privately. However, some National Health patients do supplement their footwear by buying privately and it was felt that asking a few questions about why people buy privately and their experiences might highlight a few problem areas in the National Health Service. In fact, no new information was gleaned from this section but it does serve to illustrate that some of the sources of dissatisfaction which have already been discussed in this report affect patients to such an extent that they are prepared to pay quite high prices in order to try and improve their situation. Whether or not this did improve is discussed later.

### 22.1 Reasons why patients bought privately

During the previous ten years 6% of informants had bought surgical footwear privately. Of these 29% wanted a different style or colour for their shoes, or a smarter pair for special occasions or even a pair of sandals; 24% needed to supplement their NHS quota, for example, people who had been told they could only have one pair a year or the person who said he had to wait two years for another National Health pair and he did not have anything to wear.

A few people, 15%, found their National Health footwear uncomfortable and felt they could do better if they dealt with a company directly themselves. Some 23% of patients gave various individual reasons for buying privately, many were concerned with wishing to remain independent of the National Health Service and its supply system. A few patients mentioned the long waiting times at the hospital if they had not bought privately.

It was interesting to learn that several people, 18% of those buying privately, did not know that they could get orthopaedic footwear on the National Health at the time they bought their surgical shoes privately, although now they are getting footwear made on the National Health.

### 22.2 Which footwear was preferred

We asked respondents which footwear they preferred, their private or their National Health surgical footwear; 17% preferred their private shoes, 39% preferred their National Health footwear and 44% had no preference. For the people who preferred their privately made footwear this was generally because they gave them a better fit or better style. However, two thirds of those preferring their National Health footwear thought they gave a better fit, other people mentioned better quality and a few mentioned the financial consideration of having to pay if they bought privately.

### 22.3 Comparison between the two services

All patients who had bought privately were asked whether they felt that they were given a better service when they bought privately; 33% said yes and 67% said no. The main ways in which people were given a better service were that it was quicker and more personal.

It would seem that overall patients are not much better off even if they do buy privately from an orthopaedic footwear company. From the experiences of those patients who have had both National Health and privately supplied surgical footwear, more than twice as many people preferred the footwear that had been supplied to them through the National Health than the privately made footwear and twice as many people thought the private service was no better than the National Health Service.



## 23 Changes in National Health surgical footwear over the years

It was thought that the situation may have changed over the years and that things might now be improving or even deteriorating. We asked all patients who had been wearing surgical footwear for five years or more whether their replacements were getting better, getting worse or whether they had stayed the same. Some 23% said they had got better, 9% said they had got worse and 66% said they were about the same – the remaining 2% said they were better in some ways and worse in others.

We asked people to tell us in what ways surgical footwear had changed over the years. Table 49 shows the topics on which patients made comments and whether or not this was getting better or worse.

Table 49 Changes in NHS surgical footwear over the years

Ways in which footwear has changed		Getting better	Getting worse	Base
	%			
Fit/comfort	55	% 75	25	166
Style/choice of style	35	% 87	13	99
Quality/workmanship	28	% 47	53	78
Other answers	9			

Total comments 282 = 100%

The percentages in column 1 do not add up to 100 as some people commented about more than one aspect.

Of the 282 people who felt things had changed over half commented about the fit and comfort. However, there is some consolation in that 75% thought they were getting better compared with 25% who thought they were getting worse. Just over a third (35%) of patients commented about the style or choice of style which in general also seem to be improving. However, of those who

commented about the workmanship slightly more people felt it was getting worse than felt it was getting better.

We also asked whether the service had changed over the years; 76% said it was much the same, 13% said it was getting better, 10% said it was getting worse and the remaining 1% said it was better in some ways and worse in others. Of the people who felt things had changed almost half commented about the time taken to supply footwear. This had become quicker for some people and slower for others, in fairly equal proportions. There were 14% who commented about the frequency of replacement of their footwear or the number of pairs that they were allowed to have. This had become worse rather than better.

Several people mentioned various other aspects of the system which had got better. At one time they had had to pay £3.00 towards their shoes and now they were free. The stabilisation period of five years meant that during this time patients did not have to visit the hospital but they could just ring up to reorder a replacement. However, one or two people felt that the system had become more cumbersome, for example appointments were more difficult to obtain.

In summary, by and large the situation has not changed much over the years that National Health patients have been supplied with surgical footwear. If anything the footwear itself has improved but the service seems to have deteriorated for as many people who have experienced an improvement. Many of the changes both for better and for worse can be attributed to a change in supplier or hospital service for individual patients.



## 24 Did the survey influence informants' opinions?

Chapter 5 outlined the overall level of satisfaction expressed by patients about their surgical footwear. This was based on considered assessments given after the informants had discussed the details of their boots or shoes and after giving opinions on a variety of topics any of which may give some users cause for complaint. We thought that discussing all these potential problems might encourage informants to give us a rather pessimistic view of their footwear, so it was decided that at the very beginning of the questionnaire before people had a chance to think of the drawbacks we should ask a short question which would give us a spontaneous opinion of satisfaction. This read:

*Considering that these are surgical shoes/  
boots are you generally satisfied with them or  
not?*

The answers are proportioned in the extreme right hand column of Table 50. The rest of the table shows how each group subsequently answered the considered assessment of satisfaction.

When asked to give a spontaneous opinion 79% of patients are generally satisfied with their footwear. It is interesting to compare this result with the 82% of people saying they were either satisfied or very satisfied at the later question. It would seem that our initial fears of breeding discontent by asking people to talk about their problems were unfounded and, in fact, we were more

Table 50 Change in level of satisfaction from initial spontaneous comment to considered assessment

Spontaneous opinion	Considered assessment				
	Very satisfied	Satisfied	Dis-satisfied	Very dis-satisfied	Base
Generally satisfied	% 55	41	4	*	1,223
Not satisfied	% 3	25	42	30	271
Doubtful/ don't know	% 12	43	38	7	42
Total					1,536

\*Less than 0.5%

likely to increase their level of satisfaction. This is borne out in Table 50. Of the people who were generally satisfied initially only 4% changed their minds and became dissatisfied later, but of the people who were not satisfied initially only 72% were able to justify their dissatisfaction and the remaining 28% decided, on reflection, that they were satisfied. Those people who were initially doubtful divided themselves fairly equally between the contented and the discontented.

We can conclude that the survey data is based on reasonably reliable opinions. People who are generally satisfied are not easily influenced to the contrary by underlining their potential problems and those who remain dissatisfied would seem to be patients with genuine grievances.

## 25 Summary

1 There are three main areas of patient dissatisfaction with the National Health surgical footwear service. The first concerns the footwear itself, the second concerns the arrangements for supplying surgical footwear and the third concerns the number of pairs of suitable footwear that patients have available at any one time.

2 When asked to give an overall assessment of satisfaction with their surgical footwear 82% of patients said that all things considered they were satisfied with their surgical footwear. Of the 18% who were dissatisfied 6% said they were very dissatisfied.

There are four main reasons why patients were dissatisfied with their footwear.

i Poor fit or discomfort - 12% of all patients interviewed complained that their footwear did not fit comfortably, both when the footwear was new and even after a period of wear; 30% of patients experienced some discomfort on one or other of these occasions, either when new or after some wear.

ii Difficulty with putting on surgical footwear - 29% of patients either could not put on their surgical footwear by themselves or had difficulty doing so.

iii Dislike of style or colour - 19% of patients were dissatisfied in some way with the style of their footwear.

iv Poor durability - 14% of users were not satisfied with the wear they had from their surgical footwear (21% of the child wearers' parents said they were not satisfied).

3 Overall, 87% of patients were satisfied with the arrangements for supplying surgical footwear. Of the 13% who were dissatisfied 3% said they were very dissatisfied.

There were two main reasons given for dissatisfaction with the supply arrangements.

i Time taken to get new footwear made. Of the 13% of patients who were dissatisfied with the supply arrangements overall three quarters gave the time delay as their main reason, and in particular the time from placing the order to receiving the finished boots or shoes.

The young adults aged 15-39 years were the most affected by having to wait a long time, only 58% of this age-group received their footwear within two months of placing their order.

ii Complexity of the system and inconveniences caused by the supply arrangements. This comprised several different sorts of complaints including having to make repeated visits to the hospital, involving time off work or school, waiting times at the hospital, remoteness of the shoemaker to the patient and lack of liaison between the various interested parties.

4 The major source of dissatisfaction with the whole of the surgical footwear service concerns the lack of enough suitable pairs of footwear available to wearers at any one time. Just over a third (35%) of all patients claimed to have only one pair of surgical shoes or boots available at the time of interview, including any at the repairers but excluding any that were worn out, while 60% of children had only one pair (including 6% who claimed not to have any pairs which were fit to wear). A further 46% of patients had only 2 pairs altogether. Having no spare pair or only one spare pair presents considerable difficulties when footwear needs repairing or gets wet.

In particular this affects children and the young or middle aged adults who lead a normal active daily life, such as those in employment. These people generally wear out their footwear at a faster rate than they can have them replaced, consequently they are without sufficient spare pairs for part or all of the time as they cannot get new boots or shoes made often enough.

This situation of many patients having insufficient pairs available at any one time seems to be created by a combination of contributory factors.

i Not having enough pairs as a basic stock.

ii Having to wait until one pair is completely worn out before a replacement can be ordered.

iii Waiting a long time between ordering new footwear and receiving a correctly fitting pair.

iv In some cases having the rate of replacement restricted to an allocation of one pair per year.

# Appendix A

Sampling report by David Griffiths

## 1 Sample requirements

A nationally representative sample of people recently supplied with National Health Service (NHS) surgical footwear in England and Wales was required. Eligible footwear was defined as:

a New appliances given in Section A of DHSS's 'Standard List of Appliances'. Each appliance type is specified by a code which can be used as a basis for identifying the population from which the sample is to be selected.

b Special types of footwear that are not defined in the above list but are denoted by the code letters 'AP' thereby signifying that a special price had been agreed between the manufacturer and the DHSS for that particular appliance.

The sample excluded those who had received repairs to existing shoes or who had normal footwear adapted to meet their requirements.

In order to obtain up-to-date information on the type and quality of service provided to NHS footwear users it was decided to interview only those people who had recently been fitted with footwear. Consequently, the sample only included people who had been supplied during the previous year, i.e. 17th August 1975 to 16th August 1976.

### Sampling frames

From the procedures that patients undergo when ordering footwear, outlined in Chapter 1, the sample could be chosen from one of two possible sources:

- a Hospital records kept by the appliance officer
- b Suppliers' records

Consideration was given to assessing the viability of obtaining our sample from each source.

## 2.1 The use of hospitals as a basis for selecting the sample

In order to obtain a sample from appliance officer records, it would be necessary to first select a sample of hospitals who supply surgical footwear. A complete frame of these hospitals was therefore required. Although no such frame existed the DHSS were able to provide us with a list of all hospitals with an orthopaedic department in England and Wales. To assess whether this was a complete list of all hospitals who supply footwear it was compared to a list of institutions visited by the orthotists of one large supplier. From this comparison our list was shown to be deficient of special institutions such as schools for handicapped children.

The use of hospitals was made more difficult by the fact that no information existed on the numbers of patients supplied at each hospital with footwear. Measures of size such as numbers of hospital beds, in-patients, outpatients, could be obtained but any relationship to the number of footwear users could not be ascertained because of the lack of adequate data. Selection methods utilizing measures of size could not, therefore, be adopted so hospitals would have to be sampled with equal probability. This would result in large variations in the numbers of selected patients per hospital because hospitals were known to vary quite considerably in size in terms of the number of surgical footwear patients. Furthermore, it was envisaged that only a relatively small number of hospitals would be required and so the overall sample size could vary quite markedly from the expected since the number of surgical footwear patients in each selected hospital would be left to chance and subject to large random variations.

## 2.2 The use of suppliers as a basis for selecting the sample

A complete up-to-date list of all contractors who supply surgical footwear was available together with an approximate definition of the area(s) each covered from the DHSS's, 'Supply and Repair of Surgical Appliances England and Wales'. A second potential advantage in selecting contractors related to the fact that DHSS had collected data on the money value of orders for eligible footwear items supplied by each contractor during October 1974.

Given that the correlation between the number of orders and their value was high ( $r = .78$ ) an up to date measure of size was available and would enable contractors to be selected with probability proportional to size.

The major difficulty was that the area(s) contractors work within was, for our purposes, poorly defined; thereby making it difficult to achieve a nationally representative distribution of the sample. However, any analysis of data at the regional level would be limited due to the small sample size, and so it was decided that this was not an overriding consideration when determining which frame to adopt.

## 2.3 Suppliers' records.

A few contractors were visited so that the feasibility of drawing a sample from this source could be assessed. It was found that there was a considerable amount of variability in the way that the records were kept though some sort of ordered system for identifying surgical footwear patients always existed. This was mainly

because expensive lasts sometimes had to be built for an individual, and suppliers had to be able to identify each person's last when a new order was received.

From our visits it was decided that it would be possible to obtain a random sample of footwear patients whilst ensuring that each patient had an equal chance of selection; but the method of doing this would vary according to the way the records were kept.

#### 2.4 Sampling frame used

It was decided to select suppliers as the first stage in the sample for the following reasons:

- a A complete up-to-date frame was available
- b There were reasonably accurate measures of size for each supplier.
- c It was possible to select a sample of footwear patients from this source.

#### 3 Sample size

A set sample of about 2,000 NHS footwear patients was required for the analyses envisaged. 40 first stage units (f.s.u.'s) were selected; this being a compromise between the need to avoid concentrating the sample in a small number of suppliers and scattering it uneconomically over a large number. Since suppliers were sampled with probability proportional to size only 29 different contractors were selected. This was to be expected as the largest supplies approximately 15% of the total market and the four largest, nearly 40%. Given that 40 first stage units were chosen we therefore aimed to select 50 patients per f.s.u. Thus the expected sample size per supplier would depend upon the number of f.s.u.'s selected from within each; though, to ensure an equal probability sample the actual size would vary according to the accuracy of the measure of size used.

Each of the 29 selected suppliers was sent a letter explaining the purpose of the survey and asked for their co-operation in allowing us to select our sample from their records. One contractor no longer supplied footwear but the remaining 28 firms agreed to cooperate.

A total of 1827 patients were selected. This represents a shortfall of nearly 200 from the expected number which can be largely attributed to the fact that we consistently overestimated the number of footwear patients supplied by the smaller contractors.

#### 4 Clustering

As previously explained the areas covered by suppliers were loosely defined and, in some cases very large, for example, nearly 55% of the value of footwear orders went to contractors working on a national basis. Clustering the suppliers in the selection procedure would not have achieved a significant reduction in cost. Instead it was decided to reduce the scatter of the sample by including a footwear patient only if the address at which they were living fell in a pre-selected area. It was necessary to select areas that could be accurately identified in the suppliers' records, so it was decided to adopt counties and London boroughs as the unit within which addresses were clustered.

#### 5 Stratification

As the service provided to surgical footwear patients could differ between Regional Health Authorities it was important to ensure that the sample was as representative as possible at this level, though it was recognised that the numbers in any region would be small and did not permit detailed statistical analysis. Consequently, counties and London boroughs were stratified by Health Region and a

simple random sample of 25 taken. Obviously the distribution of the final sample need not be absolutely correct as there were relatively few counties per region and the numbers of people selected within county was left to chance, but it did at least ensure some regional spread of the sample.

## 6 Selecting the sample

To ensure that each patient had the same chance of being included in the sample the measure of size used to select suppliers was converted into an estimate of the number of footwear patients and used to determine the sampling interval for each selected contractor. By using 1975 Population Estimates and calculating the proportion of the population living in pre-selected counties the intervals were adjusted to allow for the fact that people living in other counties would be excluded. It was assumed that this proportion would apply equally to all contractors.

People who had received footwear during the year 17th August 1975 to 16th August 1976 were selected by systematic random sampling through the suppliers' records. If they contained more than one entry per patient during the above period then patients were only included if their most recent order was selected, thus maintaining equal probabilities of selection.

For each selected eligible person the following details were recorded:

- a Patient's name and full address
- b Hospital name and address

- c Supplier's name
- d Contract codes for the most recent order. This code in effect describes the type of footwear that the person has received.
- e Dates when the patient saw the specialist, the fitter, and when the footwear was made and returned to the hospital.

## 7 Sample validity

DHSS's estimate of the total number of orders placed by contract code in 1974 was used as a basis for checking the distribution of the sample, since the codes are defined in terms of whether they are men's, women's or children's footwear according to the definitions in 'Surgical Appliances Contract 1976'. The following table was derived:

Appendix Table 1

	Sample number	Percentage	1974 DHSS figures	Percentage
Men	575	36.2	34,404	39.1
Women	831	52.3	43,404	49.3
Children*	182	11.5	10,176	11.6
<b>Total</b>	<b>1,588†</b>	<b>100.0</b>	<b>87,984</b>	<b>100.0</b>

† Patients receiving special footwear - such as APs - could not be placed in this table hence not all of the 1827 footwearers are shown.

\* Definition of a child is given in terms of the size of the footwear and does not correspond to the survey definition which was based upon age. (15 years and under)

It can be seen from this table that the two distributions are broadly comparable, and thus a valid, representative sample was achieved.



## Appendix B The questionnaire

SS 1988

## SURGICAL FOOTWEAR SURVEY

## Mainstage

(i) Interviewers name \_\_\_\_\_ number \_\_\_\_\_

Date of interview \_\_\_\_\_

Please copy from Sampling sheet:-

(ii) Serial number 

--	--	--	--	--

 (iii) Suppliers code number 

--	--

(iv) Contract code(s) \_\_\_\_\_

OFFICE USE			
---------------	--	--	--

(v) Interview with

Sampled person (age 16+)	1
--------------------------	---

proxy for sampled person aged 15 years

or less .....	2
---------------	---

Specify relationship of proxy

(vi) HOUSEHOLD COMPOSITION

[illegible]

(vii) Number of persons in household .....		OFFICE USE			
--	--	---------------	--	--	--

INTRODUCTION

The Department of Health and Social Security are very interested in how people manage when they need to wear surgical footwear.

1. Could I just check, did (you) receive some new surgical footwear from the National Health in \_\_\_\_\_ (month of June) or thereabouts?

Yes ...  
No ....

IF YES (1)

(a) Is this the only new pair you had between August 1976 and August 1976 or did you have any others during that time?

Only pair .....  
Had others  
(specify TOTAL number of pairs received between Aug 76 and Aug 78)

IF NO (2)

(b) When did (you) last receive some National Health surgical footwear?

never .... A  
month \_\_\_\_\_ year \_\_\_\_\_

Finally I'd like to ask you a little about (yourself)






2. Could you tell me why (you) have to wear special footwear, what does the doctor say is the matter?

(a) Does this affect one foot or both feet?

one foot only .....  
both feet .....

(b) How does this affect (your) feet/foot or leg?

<p>3. Were (you) born with this or did it occur later?</p> <p>born with it ..... occurred later .....</p>	<p>1 go to Q4 2 ask (a) &amp; (b)</p>
<p>IF OCCURRED LATER (2) (a) How did it come about? (probe for cause)</p>	<p>(b) How long ago did it start/did it happen?</p>
<p>4. Do (you) suffer from anything else that aggravates your foot (or leg) condition or adds to (your) need for surgical footwear?</p> <p>No .....</p>	<p>1</p>
<p>5. Could I see the particular pair of shoes or boots that you got last _____ (Q.1) please?</p> <p>footwear seen ..... footwear not seen (specify reason) ....</p>	<p>1 2</p>

6. Were these shoes or boots?	1 shoes (below the ankle bone) ... 2 boots (on or above ankle bone) ... 3 other (specify) .....
7. Considering that these are surgical shoes/boots are you generally satisfied with them or not? (record spontaneous comments)	1 generally satisfied ..... 2 not satisfied ..... 3 Do not prompt doubtful/DK .....
Interviewer Observations (Q8-16) If in doubt ask the questions	
8. What type of shoe or boot is it, does the ...	1 back overlap the front .....  boot or shoe  2 does the front overlap the back, .....  boot or shoe  3 or is it seamless footwear? .... 

9. Are the soles made of ....	Leather ..... 1 rubber or composition (resin rubber) ..... 2 microcellular (hushpuppy type)? ..... 3
10. Is there a stick-a-sole attached?	Yes ... 1 No .... 2
11. What sort of fastening do they have?	laces (through holes) ... 1 slip-on ..... 2 zip ..... 3 other (specify) ..... 4
12. What colour are they?	black ..... 1 brown ..... 2 beige/natural .... 3 blue/navy ..... 4 other (specify) .. 5
13. What are the uppers made of?	leather ..... 1 plastic ..... 2 felt ..... 3 other (specify) .. 4

14. Do (you) wear any additional leg appliances?	Yes .. No ...	1 2	ask (a) go to Q15	
IF YES (1)				
(a) What kind of appliance?				
ATTACHED TO SHOE/BOOT				
leg iron/caliper (below knee) -	one leg ..... both legs ....	1 2		
leg iron/caliper (above knee) -	one leg ..... both legs ....	3 4		
prompt				
if toe raising spring/appliance -	one foot ..... both feet ....	5 6		
if necessary				
WORN INSIDE SHOE/BOOT				
plastic caliper (below knee) -	one leg ..... both legs ....	7 8		
plastic caliper (above knee) -	one leg ..... both legs ....	9 10		
15. Is there a socket in the shoe/boot?	yes - one shoe/boot ..... both shoes/boots ..... no .....	1 2 3		
Observe				
16. What is sampled person wearing on feet? (If different on each foot please note)	Surgical footwear (any) ... slippers ..... other (specify) .....	1 2 3		
End of observations				
ASK				
17. Is this the first pair of surgical shoes/boots (you) have had from the National Health or have (you) had them before? (the sampled pair, Q1)	first pair ..... had before .....	1 2	ask Q16 go to Q24 page 10	

# FIRST PAIR

18. Have you been told how to get some more shoes/boots when these wear out?

yes - told .....  
no .....

1  
2  
ask (a)

IF NOT TOLD (2)

(a) So what will you do?  
(specify)

DK .....

1

If I could now talk about how you got this particular pair of shoes/boots.

19. Did you see a hospital doctor about (your) feet before being measured for these shoes/boots?

yes ..  
no ...

1  
2  
ask (a)(b)  
then go to  
Q22

IF NO (2)-did not see doctor

(a) Who referred you for surgical footwear?

specify position

(b) How did you come to be fitted for these shoes/boots?  
Please state whether and near what feet measured then go to Q22

20. Did someone refer you specially to the hospital about your foot condition or were (you) already having hospital treatment?  referred to hospital ..... already having treatment ....	1 ask (a) & (b) 2 go to Q21		
IF REFERRED (1)  (a) Who referred you?  general practitioner ..... other (specify position) .....	1 2		
(b) How long did you have to wait for your first appointment with the hospital doctor?  number of weeks .....			
At some point people are usually referred to a fitter, who is someone from the firm that supplies the footwear and would measure (you) for (your) shoes/boots.  21. How long was it after seeing the hospital doctor until the first appointment with the fitter?  same day ..... 1 day but less than 7 days ..... 1 day but less than 7 days ..... 7 days but less than 14 days ..... 14 days but less than 21 days ..... 21 days or more (specify) .....  prompt ..... as necessary .....	1 2 3 4 5		
22. For this pair of shoes/boots were (your) feet measured, was a plaster cast taken or did (you) have both done?  Code one only feet measured ..... plaster cast taken ..... both - feet measured and cast taken .....	1 ask (a) 2 ask (b) 3 ask (c)		

## IF FEET MEASURED (1)

(a) Were your feet measured at this first appointment with the fitter, or was it done later?

Yes - at first appointment or same day .....  
 done later (specify) .....  
 ..... days later

99 go to Q23

## IF PLASTER CAST TAKEN (2)

(b) Was the cast taken on the same day as (your) first appointment with the fitter, or was it done later?

yes - same day .....  
 done later (specify) .....  
 ..... days later

99 go to Q23

## IF BOTH DONE (3)

(c) How long was it from the first time (you) saw the fitter until he had taken measurements of (your) feet and taking the plaster cast?

same day .....  
 ..... days later  
 (time to complete both)

99

23. And how long was it from the time the fitter saw you until you received the shoes/boots to the time you finally received the shoes/boots?

..... weeks  
 ..... months

GO TO Q29 - page 12



<p>HAD FOOTWEAR BEFORE (Q17 code 2)</p> <p>24. For how long have (you) had to wear surgical footwear? (any surgical footwear - put date on MS)</p> <p>1 year or less ..... 1</p> <p>more than 1 year but less than 5 years ..... 2</p> <p>5 years but less than 10 years ..... 3</p> <p>10 years but less than 20 years ..... 4</p> <p>20 years but less than 40 years ..... 5</p> <p>40 years but less than 60 years ..... 6</p> <p>60 years or more (specify) ..... 7</p>		<p>Thinking about the particular pair of shoes/boots that you got last ..... (Q,1)</p> <p>26. Could I just check did you ask for this pair of shoes/boots to be made or did someone else decide that (you) needed new footwear?</p> <p>1 informant asked for new footwear ...</p> <p>2 someone else decided ..... (specify position)</p>	
<p>FOR people wearing surgical footwear for MORE THAN 1 YEAR (codes 2-7 at Q24)</p> <p>25. How often do (you) have a new pair of National Health shoes/boots made, usually?</p> <p>less than 6 months (specify) ..... 1</p> <p>6 months ..... 2</p> <p>9 months ..... 3</p> <p>10-12 months ..... 4</p> <p>13-18 months ..... 5</p> <p>19-24 months ..... 6</p> <p>over 2 years ..... 7</p> <p>over 3 years ..... 8</p> <p>over 5 years (specify) ..... 9</p>		<p>27. When was it exactly, that this pair of shoes/boots was ordered?</p> <p>month ..... year .....</p>	
<p>28. Were (your) feet measured or a plaster cast taken for this particular pair of shoes/boots?</p> <p>Code</p> <p>yes - feet measured ..... 1</p> <p>yes - plaster cast taken only ..... 2</p> <p>yes - both (feet measured and plaster cast taken) ..... 3</p> <p>none of these ..... 4</p>		<p>ask (a) &amp; (b)</p> <p>ask (c)</p>	
<p>IF FEET MEASURED/CAST TAKEN (1, 2 or 3)</p> <p>(a) How long was it from ordering these shoes/boots to when (your) feet were measured/(cast was taken)?</p> <p>days ..... weeks ..... months .....</p> <p>OR</p> <p>(b) And how long was it from when (your) feet were measured/(cast was taken) to when you received the shoes/boots?</p> <p>weeks ..... months .....</p> <p>OR</p> <p>GO TO Q29</p>		<p>IF NOT MEASURED/NO CAST TAKEN (4)</p> <p>(c) How long was it from ordering these shoes/boots to when you received them?</p> <p>weeks ..... months .....</p> <p>OR</p>	

<p>TO ALL</p> <p>I'd like to go over now what happened whilst these particular shoes/boots were being made.</p> <p>29. Did (you) have any fittings for these shoes/boots, that is, trying on the partly made footwear?</p> <p>IF YES (1) - had fittings</p> <p>(a) How many fittings did (you) have on the partly made footwear?</p> <p>_____ fittings on partly made footwear</p>	<p>yes .. 1 ask (a)</p> <p>no ... 2</p>	
<p>30. Did (you) try these shoes/boots on once they'd been fully made up, before getting them home?</p>	<p>yes .. 1 ask Q31</p> <p>no ... 2 go to Q33</p>	
<p>31. Did anyone check whether they fitted (you)?</p> <p>yes - checked .....</p> <p>no .....</p> <p>IF YES (1) - checked</p> <p>(a) Who checked?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>yes - checked .....</p> <p>no .....</p> <p>1 ask (a)</p> <p>2</p>	

<p>32. Were they ready for you then or did (you) have to have any alterations done?</p> <p>ready ..... 1</p> <p>alterations done .... 2 ask (a)</p> <p>IF ALTERATIONS DONE (2)</p> <p>(a) Why did they have to be altered?</p>	<p>33. When these shoes/boots were finished did you ....</p> <p>take them away with you after final appointment ... 1</p> <p>or did you get them in some other way? (specify) .. 2</p>	<p>34. Do you think that the time taken to supply this made-to-measure footwear was reasonable or not?</p> <p>yes - reasonable ..... 1</p> <p>not reasonable ..... 2 ask (a)</p>
	<p>IF NOT REASONABLE (2)</p> <p>0 (a) Were there any particular stages which took too long?</p> <p>Probe fully Waiting for first appointment with hospital doctor ..... 1</p> <p>code all from being measured or ordering footwear to receiving footwear .. 2</p> <p>that apply other (specify) ..... 3</p>	

35. After getting these shoes/boots home did they  
 feel tight or did your back because there was something  
 wrong with them?

yes - taken back  
 no .....

1  
 2

ask (a) & (b) & (c)  
 go to Q16

IF YES (1) - took them back

(a) What was wrong with the shoes/boots?

(b) How long did you have the shoes/boots  
 before they had to be taken back?

same day .....  
 less than 1 week .....  
 more than 1 week - 2 weeks .....  
 more than 2 weeks - 1 month .....  
 more than 1 month (specify) ...

1  
 2  
 3  
 4  
 5

(c) And how long was it before you got  
 them back again?

same day .....  
 less than 1 week .....  
 more than 1 week - 2 weeks .....  
 more than 2 weeks - 1 month .....  
 more than 1 month (specify) ...

1  
 2  
 3  
 4  
 5

36. Did you find that in general the arrangements for  
 the supply of these surgical shoes/boots caused  
 you (or did) any inconvenience?

yes - caused inconvenience ....  
 no .....

1  
 2

ask (a)

IF YES (1) - caused inconvenience  
 (a) In what ways were you inconvenienced?  
 0 (specify)

I'd like to go on to talk about the doctors you may see at the hospital

REPLACEMENT PAIR - ask Q37

FIRST PAIR - If saw doctor (code 1 at Q19) GO TO Q40  
 If did not see doctor (code 2 at Q19) GO TO Q39

37. About how often do (you) see a hospital doctor  
 concerning your feet?  
 (try to get a regular time)

about every \_\_\_\_\_ months  
 or about every \_\_\_\_\_ years  
 go to Q18  
 no regular time .....

1

ask (a) & (b)

IF NO REGULAR TIME

(a) When was the last time (you) saw a hospital doctor  
 about (your) feet?

\_\_\_\_\_ months ago  
 or \_\_\_\_\_ years ago

(b) And how long was it before that that you saw a  
 hospital doctor about (your) feet?

\_\_\_\_\_ months, before that  
 or \_\_\_\_\_ years, before that

38. Would you prefer to see him more often?

0  
 yes ...  
 no ....

1  
 2

ask (a)

IF YES (1)

(a) Why would you prefer to see him more often?  
 0

<p>39. Could I just check did (you) see a hospital doctor at all regarding (your) feet or (your) footwear in connection with getting this particular pair of shoes/boots? (excludes regular hospital visits)</p>	<p>yes .. 1 ask Q40 no ... 2 go to Q42</p>	<p>1 2</p>	<p>1 2 3 4</p>	<p>1 2 3 4</p>	<p>1 2 3 4</p>	<p>1 2 3 4</p>	<p>1 2 3 4</p>
<p>40. How many times in all did (you) see a hospital doctor, for these shoes/boots?</p>	<p>once only ..... 1 go to Q41 more than once .... 2 ask (a)</p>	<p>1 2</p>	<p>1 2</p>	<p>1 2</p>	<p>1 2</p>	<p>1 2</p>	<p>1 2</p>
<p>IF MORE THAN ONCE (2) (a) Did (you) see the same doctor on each occasion?</p>	<p>yes - same .. 1 go to Q41 no ..... X ask (i)</p>	<p>1 X</p>	<p>1 2</p>	<p>1 2</p>	<p>1 2</p>	<p>1 2</p>	<p>1 2</p>
<p>IF NOT SAME (X) (i) How many different hospital doctors did (you) see, for these shoes/boots?</p>	<p>number of different hospital doctors seen ....</p>	<p>1 2</p>	<p>1 2</p>	<p>1 2</p>	<p>1 2</p>	<p>1 2</p>	<p>1 2</p>
<p>41. Could I just recap, on what occasion(s) did (you) see the hospital doctor?</p>	<p>prompt as necessary</p>	<p>1 2 3 4</p>	<p>1 2 3 4</p>	<p>1 2 3 4</p>	<p>1 2 3 4</p>	<p>1 2 3 4</p>	<p>1 2 3 4</p>

Interviewer:

I'd now like to talk about the shoes/boots that you got last \_\_\_\_\_ (Q1)

43. Were (you) given any choice of colour for these shoes/boots?

Yes - given choice ..  
Not given choice ....

IF YES - GIVEN CHOICE (1)

(a) What colours were available?

black ..... 1  
brown ..... 2  
all that apply ..... 3  
blue/navy ..... 4  
other (specify) ..... 4

(b) Are (you) satisfied with this range of colours?

0 ..... 1  
not satisfied .. 2  
other (specify) ..

IF NO - NOT SATISFIED (2)

(1) What other colours would you like to have had available?

(specify)

IF NO - NOT GIVEN CHOICE (2)

(c) Would (you) like to have any other colours available?

0 ..... 1  
other (specify colour) ..... 2  
No .....

Interviewer Note:

If change of material eg suede mentioned spontaneously make notes here.

<p>44. Then (you) were having these shoes/boots made was there a choice of style?</p> <p>Yes - choice .... No .....</p>	<p>1 ask (a) 2 ask (b)</p>
<p>IF YES (1) (a) What choices were available? (specify)</p>	
<p>IF NO (2) (b) Bearing in mind that certain special features are available, what style of shoes/boots would you like to have been given a choice of style? 0 ..... 1 other ..... 2 No ....</p>	
<p>45. Are (you) satisfied with the style of the shoes/boots you got last _____ (Q1)?</p> <p>Yes - satisfied ..... 1 Not satisfied ..... 2</p>	<p>1 go to Q46 2 ask (a) &amp; (b)</p>
<p>IF NOT SATISFIED (2) (a) Why aren't you satisfied with the style? (specify) 0 ..... other .....</p>	
<p>(b) Are there any particular features you would like these shoes/boots to have which would improve the style? (specify) 0 ..... other .....</p>	



46. When (you) first started wearing this pair of shoes/boots did they fit comfortably or not? 0 (Code given if only) hardly worn	1 Yes - fitted comfortably ..... 2 No - did not fit comfortably .... 3 no feeling in feet .....	ask (a) go to Q52
IF NOT COMFORTABLE (2) (a) why didn't they fit comfortably? 0 only		
47. Sometimes the fit of a shoe/boot changes over time, do they fit comfortably now? 0 only	1 Yes - comfortable now ..... 2 No - not comfortable now ..... 3 Sampled footwear not worn/ hardly worn .....	ask (a) go to Q52
IF NO (2) - not comfortable now (a) And why don't they fit comfortably now? Same reason as before .... Other (specify) .....		
Other people have mentioned particular things, apart from fit, which cause them discomfort. I'd like to ask how (you) feel about them.		
48. Generally do these shoes/boots feel ... too heavy ..... 0 running prompt only too light ..... only or about right? .....	1 too heavy ..... 2 too light ..... 3 or about right? .....	
49. Do (you) find that generally the shoes/boots are ... 0 too stiff ..... 0 running prompt only bend too easily .... only or are about right?....		

50. Wearing these shoes/boots would you say (your) feet got unduly hot ... 0 running prompt only	1 most of the time .... 2 sometimes ..... 3 or seldom? .....
I'd just like to sum up what we've been saying about the comfort of this pair of shoes/boots. 51. On the whole when (you) are wearing this particular pair of surgical shoes/boots do they feel ... 0 only	
very comfortable ..... comfortable ..... uncomfortable ..... or very uncomfortable? .....	1 2 3 4
52. Have you bought any additional pads or other foot aids to wear inside these shoes/boots? Yes (specify) .... No .....	
53. Have you yourself had these shoes/boots altered in any way? (excluding repairs) Yes - altered .... No .....	
IF YES - ALTERED (1) (a) What alterations have been made? (specify)	
(b) Why did they have to be altered? (specify)	
ask (a) & (b) go to Q54	

54. Are (you) able to put this particular pair of shoes/boots on and fasten them up by (yourself) or do you need somebody to help you? (If child too young ask of parent)	1 ask (a) 2	
<p>able to put on own shoes/boots</p> <p>Need someone to help .....</p>		
IF PUT ON OWN SHOES/BOOTS (1)		
(a) Do (you) have any difficulties putting on these shoes/boots or fastening them?	1 2 go to Q58	
<p>Yes - has difficulties ....</p> <p>No .....</p>		
55. Are the problems in putting on the footwear due to the shoes/boots themselves, is it because of (your) general condition or is it a bit of both?	1 ask Q56 & 57 2 go to Q57 3 ask Q56 & 57	
<p>shoes/boots themselves ....</p> <p>Code only</p> <p>general condition .....</p> <p>bit of both .....</p>		
56. What is it about the shoes/boots that causes difficulty? (expect/ly)		
57. Is there anything that could be done to these shoes/boots to make them easier to put on, or fasten? (expect/ly)		

58. Do you think these shoes/boots are reasonably well made or not?	1 2 ask (a)	
<p>Yes - well made .....</p> <p>No - not well made .....</p>		
IF NOT WELL MADE (2)		
(a) Why do you say that they are not well made? (expect/ly)	1 2	
0		
59. Is there anything else you'd like to say about the comfort or suitability of these shoes/boots which I haven't covered?	1 2	
<p>Yes (expect/ly) .....</p> <p>No/nothing additional .....</p>		

## OVERALL SATISFACTION WITH SHOES/BOOTS

60. Now, thinking of all you have just said about this particular pair of shoes/boots, overall are you ...

- 0
- |                           |   |           |
|---------------------------|---|-----------|
| very satisfied .....      | 1 | go to Q61 |
| satisfied .....           | 2 |           |
| dissatisfied .....        | 3 | ask (a)   |
| or very dissatisfied .... | 4 |           |

with this footwear?

## IF DISSATISFIED (3 or 4)

(a) May I just check, what are your main reasons for being (very) dissatisfied with these shoes/boots?

- 0
- |   |   |
|---|---|
| fit/comfort .....                       | 1 |
| style .....                             | 2 |
| colour .....                            | 3 |
| difficulty in putting on footwear ..... | 4 |
| durability .....                        | 5 |
| other (specify) .....                   | 6 |

## NUMBER OF PAIRS

61. Can I just check, how many pairs of National Health surgical footwear have (you) got at the moment for everyday general use?

Interviewer check  
 respondent has  
 included - any at present  
 or old prescription which  
 should not be worn.

- 1 pair ..... 1 ask (a)  
 2 pairs ..... 2  
 3 pairs ..... 3  
 4 or more (specify) .... 4

## IF 1 PAIR (1)

(a) Has the hospital or supplier told you whether or not (you) can have a second pair?

- can have 2nd pair ..... 1  
 cannot have 2nd pair .... 2  
 not told/h.k. .... 3

62. Do you find that \_\_\_\_\_ pairs (quote number from Q61) are enough for everyday general use?

- 0
- |         |   |
|---------|---|
| Yes ... | 1 |
| No .... | 2 |
- ask (a) & (b)

## IF NOT ENOUGH PAIRS (2)

(a) How many pairs altogether do you think (you) need for everyday use?

specify number of pairs \_\_\_\_\_

(b) Why is that?  
 0 (specify)

63. Do (you) have any National Health footwear for any other purpose apart from everyday use?

- Yes - work boots ..... 1 ask (a)  
 Yes - other (specify) .. 2  
 No other footwear ..... 3

IF HAS WORK BOOTS (1)

(a) Have your work boots got a protective toe cap?

- Yes ... 1  
 No ... 2

64. Does the footwear that (you) have generally meet (your) needs or do you ever feel that (you) need surgical footwear for any other purpose?

- needs generally met ..... 1  
 require for other purpose .. 2 ask (a)

IF REQUIRE FOR OTHER PURPOSE (2)

(a) What purpose(s)?

- slippers ..... 1  
 other (specify) ... 2

# REPAIRS

I'd now like to go on to talk about repairing your footwear.

65. Have you ever had repairs done to any of (your) National Health surgical shoes/boots?

- Yes ... 1  
 No .... 2 ask (a)

IF NOT HAD REPAIRS DONE (2)

(a) Is that because they haven't needed to be repaired or is there some other reason?

- not needed to be repaired ..... 1 go to Q75 (p.31)  
 other reason (specify) ..... 2

66. How long do (your) shoes/boots usually last before they are in need of a repair?

- 1 month or less ..... 1  
 over 1 month but less than 3 months.... 2  
 3 months but less than 6 months... 3  
 6 months but less than 1 year .. 4  
 1 year or more (specify) ..... 5

67. How long do (your) shoes/boots usually last before they need to be replaced?

- not needed to be replaced yet ..... 1  
 1 month or less ..... 2  
 over 1 month but less than 3 months .. 3  
 3 months but less than 6 months ..... 4  
 6 months but less than 1 year ..... 5  
 1 year but less than 18 months ..... 6  
 18 months or longer (specify) ..... 7

<p>68. In general are you satisfied with the amount of wear you get from (your) shoes/boots or not?</p> <p>0</p> <p>Yes - satisfied ..... 1</p> <p>No - not satisfied ..... 2</p>	<p>ask (a)</p> <p>1</p> <p>2</p>
<p>IF NO (2) - NOT SATISFIED</p> <p>(a) Is there any particular part of the shoe/boot that always wears out quickly?</p> <p>Yes - particular part (<i>specify</i>) ..... 1</p> <p>No particular part ..... 2</p>	<p>ask (a)</p> <p>1</p> <p>2</p>
<p>TO PERSONS WHO HAVE HAD REPAIRS - Q65 code 1</p> <p>If not had repairs (Q65 code 2) go to Q70, page 21</p> <p>Could we talk now about the last time you had a pair of shoes/boots repaired.</p> <p>69. What was done last time (your) shoes/boots were repaired?</p> <p>Heels only ..... 1</p> <p>Soles only ..... 2</p> <p>Soles and heels ..... 3</p> <p>Other (<i>specify</i>) ..... 4</p>	<p>ask (a)</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p>

<p>70. Last time did you have them repaired through the National Health or privately?</p> <p>National Health ..... 1</p> <p>privately/own repairs ..... 2</p>	<p>ask (a)</p> <p>ask (b)</p> <p>1</p> <p>2</p>
<p>IF NATIONAL HEALTH (1)</p> <p>(a) Did the arrangements for getting the shoes/boots repaired cause you any undue inconvenience?</p> <p>0 (<i>Inconvenience to proxy or child</i>)</p> <p>Yes - caused inconvenience ..... 1</p> <p>No ..... 2</p>	<p>ask (1)</p> <p>go to Q71</p> <p>1</p> <p>2</p>
<p>IF CAUSED INCONVENIENCE (1)</p> <p>(1) What in particular was inconvenient?</p> <p>0 (<i>specify</i>)</p> <p>GO TO Q71</p>	<p>ask (a) &amp; (b)</p> <p>go to Q72</p> <p>1</p> <p>2</p> <p>3</p>
<p>IF REPAIRED PRIVATELY (2)</p> <p>(b) Why did you have them done privately?</p> <p>0 (<i>specify</i>)</p>	<p>ask (a) &amp; (b)</p> <p>go to Q72</p> <p>1</p> <p>2</p> <p>3</p>
<p>71. After (your) shoes/boots were last repaired was there any change in the way they fitted?</p> <p>Yes - fit changed ..... 1</p> <p>No ..... 2</p> <p>Not back yet/not worn yet ..... 3</p>	<p>ask (a) &amp; (b)</p> <p>go to Q72</p> <p>1</p> <p>2</p> <p>3</p>
<p>IF YES - FIT CHANGED (1)</p> <p>(a) Did they fit better or worse after being repaired?</p> <p>better ..... 1</p> <p>worse ..... 2</p>	<p>ask (a) &amp; (b)</p> <p>go to Q72</p> <p>1</p> <p>2</p> <p>3</p>
<p>(b) In what ways had the fit changed?</p> <p>(<i>specify</i>)</p>	<p>ask (a) &amp; (b)</p> <p>go to Q72</p> <p>1</p> <p>2</p> <p>3</p>



TO ALL - COMPLAINTS

72. Were you satisfied with the way in which this repair was done, or not?  
0

Yes - satisfied ....  
Not satisfied .....

ask (a)  
1  
2

IF NOT SATISFIED (2)

(a) Why were you not satisfied?  
0 (specify)

73. How long did they take to be repaired last time?

Same day .....  
1 - 2 days .....  
3 - 7 days .....  
more than 1 week - 2 weeks .....  
more than 2 weeks - 3 weeks .....  
more than 3 weeks - 1 month .....  
more than 1 month - 2 months .....  
over 2 months (specify) .....  
.....

1  
2  
3  
4  
5  
6  
7  
8

74. Are (you) able to manage whilst (your) shoes/boots are being repaired or does it cause any particular problems?  
0

Can manage .....  
Causes problems .....

ask (a)  
1  
2

IF CAUSES PROBLEMS (2)

(a) What sort of problem does it cause?  
0 (specify)

75. Have you ever felt the need to make a complaint to anyone about (your) surgical footwear or about the whole process of getting them?

Yes ...  
No ....

ask Q76  
1  
2  
go to Q77

IF YES (1) - NEEDED TO COMPLAIN

76. Have you ever made a complaint?

Yes ...  
No ....

ask (a)-(d)  
1  
2  
ask (e)

IF YES (1) - COMPLAINED  
(If more than one complaint mentioned ask about last one)

(a) About how long ago was it that you made this complaint?  
(approx time) ..... years ago.

IF MORE THAN 10 YEARS AGO - go to Q77  
IF 10 YEARS AGO OR LESS - ASK (b)

(b) What exactly did you complain about?

time taken to get footwear .....  
fit/comfort .....  
style/colour .....  
number of pairs allowed to have .....  
other (specify) .....

1  
2  
3  
4  
5

(c) Who did you complain to?

fitter .....  
hospital doctor/consultant ...  
other (specify) .....

1  
2  
3

(d) Were you satisfied with the outcome?

Yes ...  
No ....

1  
2  
go to Q77

IF NO (2) DID NOT COMPLAIN

(e) Was there any particular reason why you did not complain to anyone?

Yes (specify) .....  
No particular reason ...

1  
2

## MOBILITY

If informant cannot walk ring code 1 ..... go to Q80

## Introduce

Could I go on to talk about (yourself) now? I'd like to get some idea of how important (your) surgical footwear is in walking (your) feet about.

77. (i) What (you) are wearing your surgical footwear, do (you) have any difficulty in walking about indoors?

Yes - has difficulty ..... 1  
No difficulty ..... 2

(ii) Do (you) have any difficulty in walking about out of doors? (bearing surgical footwear)

Yes - has difficulty ..... 1  
No difficulty ..... 2

(iii) Do (you) have any difficulty in climbing up steps or stairs? (bearing surgical footwear)

Yes - has difficulty ..... 1  
No difficulty ..... 2

## TO PERSONS UNDER 60 YEARS

(If 60 or over go to Q78)

(iv) Would (you) have any difficulty running, if (you) wanted to do so? (bearing surgical footwear)

Yes - have difficulty ..... 1  
No difficulty ..... 2

78. (i) Now if (you) didn't wear surgical shoes/boots, would (you) have any difficulty walking about indoors?

Yes - have difficulty ..... 1  
No difficulty ..... 2

(ii) Would (you) have any difficulty walking about out of doors? (not bearing surgical footwear)

Yes - have difficulty ..... 1  
No difficulty ..... 2

(iii) Would (you) have any difficulty climbing up steps or stairs? (not bearing surgical footwear)

Yes - have difficulty ..... 1  
No difficulty ..... 2

## TO PERSONS UNDER 60 YEARS

(If 60 or over go to Q79)

(iv) Would (you) have any difficulty running, if you wanted to do so? (not bearing surgical footwear)

Yes - have difficulty ..... 1  
No difficulty ..... 2

Thinking about (your) daily life,

79. For how long are (you) on your feet, walking about or standing during the day, would you say it was ....

for half the day or more ..... 1  
for about a quarter of the day ..... 2  
for just an hour or two ..... 3  
or hardly at all? ..... 4

running promptly

TO ADULTS - Age over 15 years

(Children - age 15 years and under go to Q84)

80. May I just check are you at present doing any kind of paid work for more than 10 hours a week?

Yes ... 1 ask (a)  
No .... 2 ask (b)

IF YES (1) - WORKING MORE THAN 10 HOURS A WEEK

(a) How many hours a week do you generally do excluding mealbreaks but including any regular overtime?

Code full-time or part-time

over 30 hours - full-time ..... 1 go to Q81  
up to and including 30 hours - part-time ..... 2

IF NO (2) - NOT WORKING OR WORKING 10 HOURS OR LESS

(b) Are you .....

retired ..... 3  
unemployed ..... 4 go to Q85  
permanently sick/disabled ..... 5  
housewife ..... 6  
Code one only  
at school ..... 7 go to Q84(a)  
in other full-time education? ..... 8 go to Q85

TO PERSONS WORKING MORE THAN 10 HOURS A WEEK

OCCUPATION

81. What do you do in your job?  
(write for Job Title and description  
of work done)

employed ..... X  
self-employed ... Y

IF MANAGER, SUPERVISOR OR SELF-EMPLOYED

number of employees  
none ..... A  
1 - 24 ..... B  
25 or more ..... C

INDUSTRY

82. What does the organisation you work for actually  
make or do?  
(specify)

83. May I just check, does the sort of work you do mean  
that you have to be on your feet a lot?

Yes - on feet a lot:  
No .....  
1  
2

go to Q85

ASK FOR CHILDREN AGE 15 YEARS AND UNDER

84. Does your son/daughter go to school?

Yes ... 1 ask (a)  
No ... 2 go to Q85

IF YES

(a) Is this a special school of some kind or just  
an ordinary school?

special school ... 1  
ordinary school .. 2

IF SPECIAL SCHOOL

(i) What kind of school is it?

school for physically handicapped ..... 1  
school for mentally handicapped/retarded... 2  
other (specify) ..... 3

(ii) Could I just check, thinking again of the boots/  
shoes (you) got in (Q1), did you get them  
through the school or on your own through the  
hospital?

through school ..... 1  
on own through hospital ..... 2

## TO ALL

We are interested in how much people wear their special footwear.

85. For how long do (you) wear surgical footwear each day, as a rule. Would you say ....

(either private or NHS)

- Running prompt
- 1 for all the time .....
  - 2 for most of the time .....
  - 3 for about half the time .....
  - 4 or for less than half the time? .....
  - 5 not at all .....

86. Could I just check, are there any occasions when (you) don't wear surgical footwear?

- 1 Yes ...
- 2 No ....

(a) When don't (you) wear them?

(specify)

(b) Why don't (you) wear them -----?

(ask for each occasion)

(specify)

(c) What do (you) wear instead of surgical shoes?

(specify)

- 1 slippers ....
- 2 other (specify) ..

(d) Have these been altered in any way to make them more suitable?

- 1 Yes - altered ....
- 2 No .....

IF YES (1) - altered

(1) In what ways have they been altered?

## PRIVATE SURGICAL FOOTWEAR

87. Have you in the last 10 years bought any surgical footwear privately?

- 1 Yes ...
- 2 No ....

ask (a)-(c)  
see CHECK at  
(Q88)

IF YES (1)

(a) Why did you feel it necessary to buy privately?

(specify)

(b) Which do/did you prefer, the private or the national health shoes/boots?

- 1 private .....
- 2 national health ...
- 3 no preference ....

ask (1)  
go to (c)

IF PREFER ONE PAIR (1 or 2)

(1) Why do you prefer your \_\_\_\_\_ footwear?

(specify)

(c) Did you feel you were given any better service when you bought privately?

- 1 Yes - better service from private.
- 2 No .....

ask (1)  
see CHECK at  
(Q88)

IF YES

(1) In what ways (were you given a better service)?

(specify)

CHECK back to Q24

For everyone who has been wearing surgical footwear for 5 years or more ask Q88.  
Others go to Q91

We'd like to compare the sort of footwear that you are getting now with that which you used to get in the past.

88. Over the years that you have been getting National Health surgical footwear do you think that your replacements are getting better, getting worse, or have they stayed about the same?

- |   |   |
|---|---|
| getting better (only) .....               | 1 |
| getting worse (only) .....                | 2 |
| better in some ways/worse in others ..... | 3 |
| about the same .....                      | 4 |

IF GETTING BETTER OR WORSE (1, 2 or 3)

(a) In what ways are they getting .....

better?

worse?

89. And how about the service from the National Health, over the years is this getting better, getting worse, or has it stayed about the same?

- |   |   |
|---|---|
| getting better .....                      | 1 |
| getting worse .....                       | 2 |
| better in some ways/worse in others ..... | 3 |
| about the same .....                      | 4 |

IF GETTING BETTER OR WORSE (1, 2 or 3)

(a) In what ways is it getting .....

better?

worse?

TO ALL

90. Is there anything else you'd like to say that I haven't covered?  
(specify)

Nothing else ..... 1

THANK FOR CO-OPERATION

91. It's possible that at some future time we might be able to offer you a chance of getting only a possibility but would you be willing for us to call again?

- |                       |   |
|-----------------------|---|
| Yes - willing .....   | 1 |
| No - not willing .... | 2 |

IF YES - willing

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